



ALASKA DATA ENTERPRISE REPORTING (ALDER)

ALDER 201 FOR REPORT DEVELOPERS



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CHAPTER 1

Key Points of Emphasis

Error Message Prompts

System Timeouts

System Security

 User IDs and Passwords

 Role-Based Security

Recommended Browsers



Secure Website

Windows-Like Environment

No Trash or Recycle Bin

Multiple Ways to Perform Functions

Key Terminology

- **Error message prompts**
You may see error message prompts if you do not have security access for a feature or data, or if there is a problem with the report or application. If you need to send a message to your agency advocate, include the error message number and text, or a screenshot of the error message, and an explanation of what happened.
- **System Timeouts**
The system has a 60-minute timeout with automatic logout. This means that you will automatically be logged out of the system after 60 minutes of inactivity. This is measured from the last time you downloaded data from the server (e.g., refreshed). Save often if working on a new report.
- **System Security**
 - User IDs and Passwords – These are the same user IDs and passwords that you use for the State of Alaska e-mail system. When you log into ALDER, your user ID and password are authenticated using the state security credentials. Do NOT share your user ID or password with anyone.
 - Role-Based Security – Your security access has been established based on the level necessary to perform your job duties; ALDER will not display data that exceeds your security level on a report. Keep in mind that this security feature only applies on ALDER (Web Intelligence) reports; if a report is saved as an Excel or CSV file, all data will be displayed, regardless of security level. Users are responsible for the security and privacy of the data they access in ALDER. (AS 39.52.140)
- **Recommended Browsers**
To ensure full functionality, the following browsers are recommended for accessing ALDER:
 - Microsoft Internet Explorer 7.0
 - Microsoft Internet Explorer 8.0 (using compatibility mode)
- **Secure Website**
ALDER is located on a secure website and is protected by the state's firewall. Consequently, the ALDER system cannot be accessed from outside the state enterprise system.
- **Windows-Like Environment**
ALDER is formatted into a Windows-like environment, particularly the folder structure where reports are housed. Folders may contain subfolders, and each folder can be expanded or collapsed by clicking on the  or  buttons next to each folder.
- **No Trash or Recycle Bin**
There is no "trash" or "recycle" bin in ALDER, so **once the delete function for folders or reports has been chosen and confirmed, that action cannot be undone**. Use caution when deleting items in ALDER.
- **Multiple Ways to Perform Functions**
There are multiple ways to perform the same function in ALDER. Some of these include double clicking, using the arrows, and/or right clicking. In most cases, this student guide only shows one of these ways.
- **Key Terminology**
A list of key terminology can be found in the appendix.

CHAPTER 2

Logging Into ALDER and Setting Preferences

Goals and Objectives

Accessing ALDER Web-Page

Sign into ALDER

Setting Preferences

Goals and Objectives:

After you complete this chapter, you will be able to:

- Access the ALDER Web-Page
- Sign into ALDER
- Change your preferences

Access the ALDER Web-Page:

- To use ALDER, you must first open the Microsoft Internet Explorer Web Browser
- Type in the web-address (URL) for ALDER

<https://alder.state.ak.us>

Note: By signing into ALDER, you are agreeing to the principles of data stewardship and Alaska Statute 39.52.140

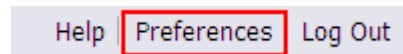
Signing into ALDER:

- Enter your ALDER user name and password
- Click the Log On Button
- If you have successfully logged in, your screen should look similar to the picture below

- You may need to verify your Internet setting to allow pop-ups (see FAQ)

Setting your Preferences to Report Developer:

As a Report Developer, you will want to verify that your *preferences* have been properly set.



- Click on the preference button located in the ALDER Header panel on the right
- Collapse the General folder (click on the arrow)
- Click on the Web Intelligence arrow (to expand)
- Select a default view format:
 - a. Select - Interactive
- Select a default creation/editing tool:
 - a. Select - Interactive
- Verify that the options **selected** are the same as the picture below

Web Intelligence

Select a default view format:

☐ Web (no downloading required)

☒ Interactive (no downloading required)

☐ PDF (Adobe AcrobatReader required)

When viewing a document:

☐ Use the document locale to format the data

☒ Use my preferred viewing locale to format the data

Select a default creation/editing tool:

☐ Advanced (Java 2 required)

☒ Interactive (no downloading required)

☐ Desktop (Web Intelligence Rich Client required)

☐ Web Accessibility (508 Compliant)

Select a default Universe:

No default universe

- Scroll to bottom of screen and click OK

CAUTION: Do not change any other preferences other than the ones discussed here or in the ALDER 101 Student Guide. All other preferences are system specific and any changes that you make can affect your ability to use ALDER!

Summary:

After completing this chapter, you are now able to:

- Access the ALDER Web-Site
- Change preference settings

CHAPTER 3

Edit Query Panel

Goals and Objectives

Accessing the Edit Query Panel

Edit Query Toolbar

Universe Panel

Result Objects Panel

Query Filters Panel

Goals and Objectives:

After you complete this chapter, you will be able to:

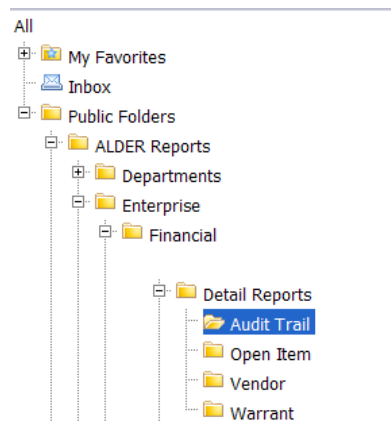
- Access the Edit Query panel
- Identify the three different panels within Edit Query
- Identify Information Classes within the Universe
- Identify Universe Objects
- Arrange Objects within the Result Objects panel
- Identify the different types of filters

Accessing the Edit Query Panel:

From the homepage click on Document List to access the Navigation panel

In the Navigation panel:

- Click on the “+” next to Public Folders
- Click on the “+” next to ALDER Reports
- Click on the “+” next to Enterprise
- Click on the “+” next to Financial
- Click on the “+” next to Detail Reports
- Click on the “+” next to Audit Trail
- Click on Audit Trail so that it is highlighted

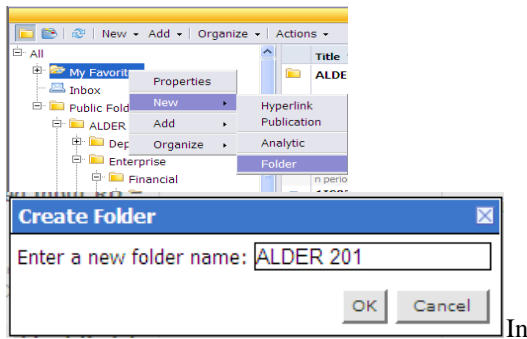


In the Workspace panel:

- Highlight (click) report “**Detail Transactions for Appropriation**”
- Right click on the highlighted report
- Select Organize
- Select Copy

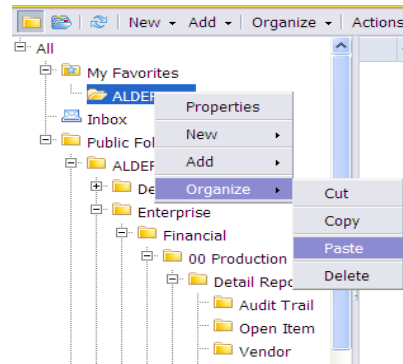
Create ALDER 201 folder:

- Highlight My Favorites Folder
- Right click – Select New; Folder
- Name your folder ALDER 201
- Click OK



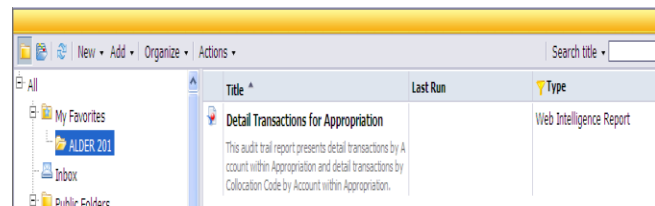
the Navigation panel:

- Highlight ALDER 201 Folder
- Right click – Select Organize; Paste

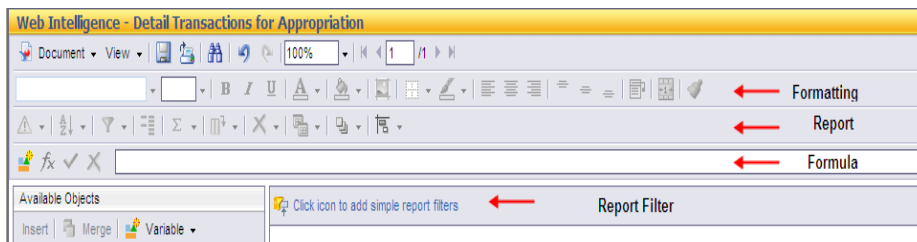


In the Navigation panel:

- Verify that the report copied to this folder



- Open copied report from ALDER 201 folder
- Maximize your Real Estate (discussed in the ALDER 100 and ALDER 101 Student Guides)
- Verify all Toolbars are active (discussed in ALDER 101 Student Guide)



Notice the Edit Query button. This is the only **NEW** option that has been added to your workspace.

- Click the Edit Query button

Notice that there are three different panels within the Edit Query

1. The Universe panel

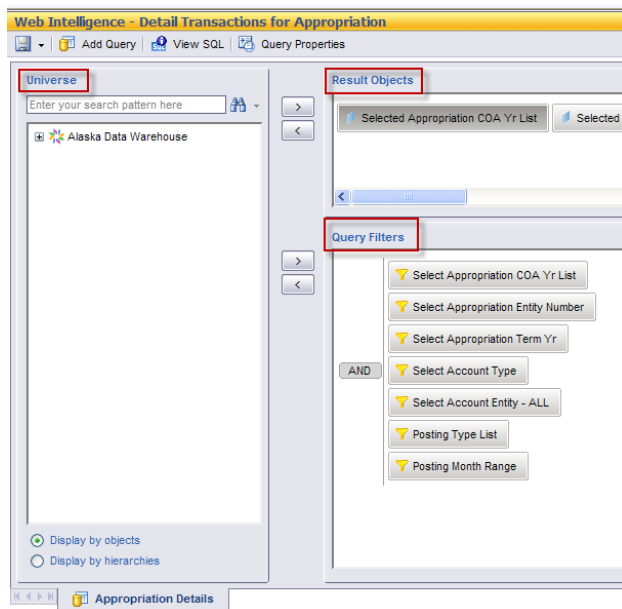
- This is the location of all the data objects that you might want to report on or display within your report

2. The Result Objects panel

- Objects from the Universe panel are placed here to be display on a report
- These become the “Available Objects within a report

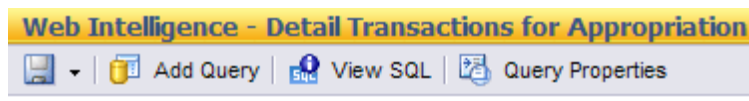
3. Query Filters panel

- This is where you place objects to limit or filter the information being retrieved from the data warehouse



Edit Query Toolbar discussion:

At the top of the Edit Query panel, there are four new buttons:



1. Save
2. Add a Query
 - Allows you to add additional queries to filter for different sets of data that you might want to display
 - It is easier to duplicate a query than to add a query
3. View SQL
 - As you build or change your query, Web-Intelligence automatically generates the programming language for the data objects you are using to retrieve information from the data warehouse
 - You can export this into Word
4. Query Properties

Query Properties

Query name:

Universe:

☐ Max rows retrieved

☐ Max retrieval time sec

☒ Retrieve duplicate rows

☒ Reset contexts on refresh

☐ Sample result set

☒ Allow other users to edit all queries

Prompt order:

Clear context

Scope of analysis:

? More Information

Select query properties here to minimize the size of documents and the query run time.

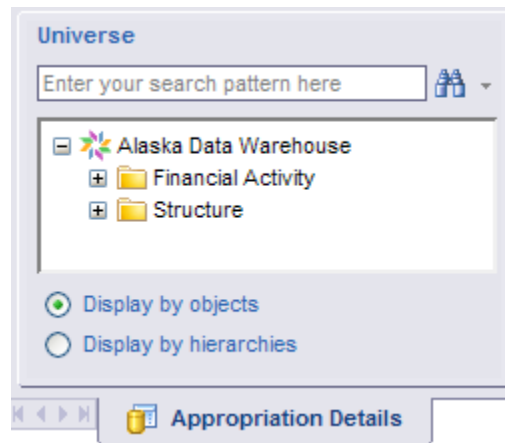
OK Cancel

- a. **Query Name** – When building queries, you should always assign your query a name. (This will be discussed in more detail when we build multiple queries)
- b. **Universe** – Name of the universe that data is being pulled from.
- c. **Max Rows Retrieved** – Limits the number of rows retrieved from the data warehouse. It is recommended that you do not select this option. You may not get all of your data if you do
- d. **Max Retrieval Time** – Limits the amount of time that the query will search through the data warehouse. It is recommended that you do not select this option. You may not get all of your data if you do
- e. **Retrieve Duplicate Rows** – When unchecked, ALDER will summarize rows that have the same data. If left checked, each row of data will be displayed independently on your report
- f. **Reset Context on Refresh** – Not used by ALDER, leave this box checked
- g. **Allow Other Users to Edit all Queries** – If unchecked, other users will not be able to modify the query. It is recommended that you leave this checked
- h. **Prompt Order** – Allows you to change the order of prompts when you are filtering on dimensions, measures, or details. You cannot change the prompt order on predefined filters
- i. **Scope of Analysis** – Used to limit the drill down options within a report

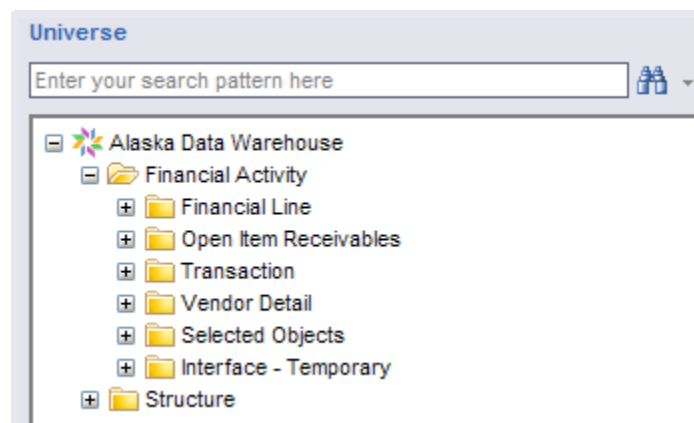
Universe Panel Discussion:

The universe in ALDER contains all the data objects that can be reported on. If a data field exists in AKSAS (Alaska State Accounting System), then a data object has been created in ALDER.

Currently, there are two main *Information Classes* within the universe, Financial Activity and Structure.







Objects from the Financial Activity information class should not be mixed with objects from the Structure information class.



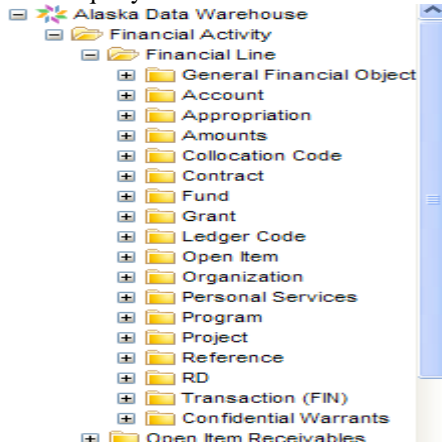
Objects from the Financial Line folder should not be mixed with objects from the Transaction folder.

Within the Universe panel, there are five types of objects:

1.  **Dimension** – objects that data is aggregated by (e.g., appropriation, fund, grant, collocation code, ledger code, vendor zip code, open item type, date processed, chart of account year).
2.  **Measure** – objects that data is calculated on (e.g., actual, encumbrance, original budget, restrictions).
3.  **Detail** – objects associated with dimensions that are unique (e.g., address, phone number, transaction amount, schedule pay amount).
4.  **Predefined Filters** (information selectors) – objects defined within the universe to filter data retrieved by the query from the data warehouse. These filters have predefined parameters (e.g., Posting Type List, Posting Month Range, Collocation Code List, Open Item Number, Fiscal Period Code, Transaction Code). These objects can only be used in the Query Filters panel.

5. **Selected dimension** – objects associated with predefined filters. If a predefined filter is used, the associated selected dimension should also be used (e.g., Select Ledger Code List, Selected Ledger Code List). These objects allow you to display in the Header Box what data is being retrieved from the data warehouse.

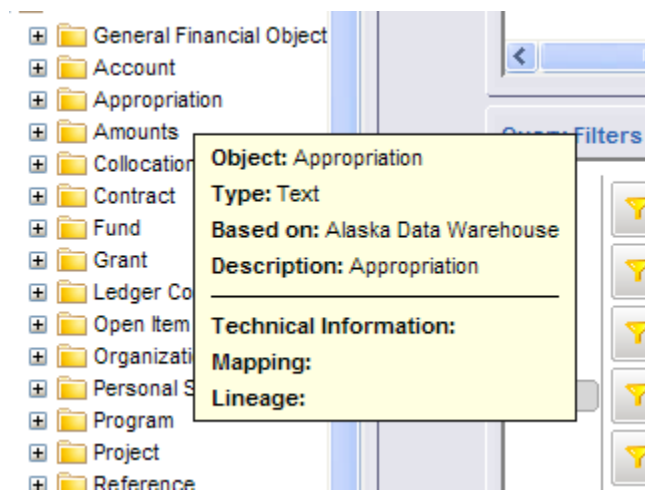
Objects within the Universe are grouped together in sub-folders by data type. When developing a report, use caution when pulling objects from subfolders. Crossing subfolders could result in no information being returned by the query.



If an object is not specific to a data type, it is listed in one of the General Objects folder (e.g., Posting Type, Posting Month, COA Yr, Date Processed, Document Number, Source System ID).

Note: It is important that you understand how the Universe is arranged, how the objects are ordered, and what the object types mean!

If you do not know what an object is or how it is defined, you can hover over the object within the Universe panel and a brief description will be displayed.



It can be difficult to **locate objects**; however, with continued use and review of folders you will be able to find objects quicker. Following are some useful hints when you are looking for objects:

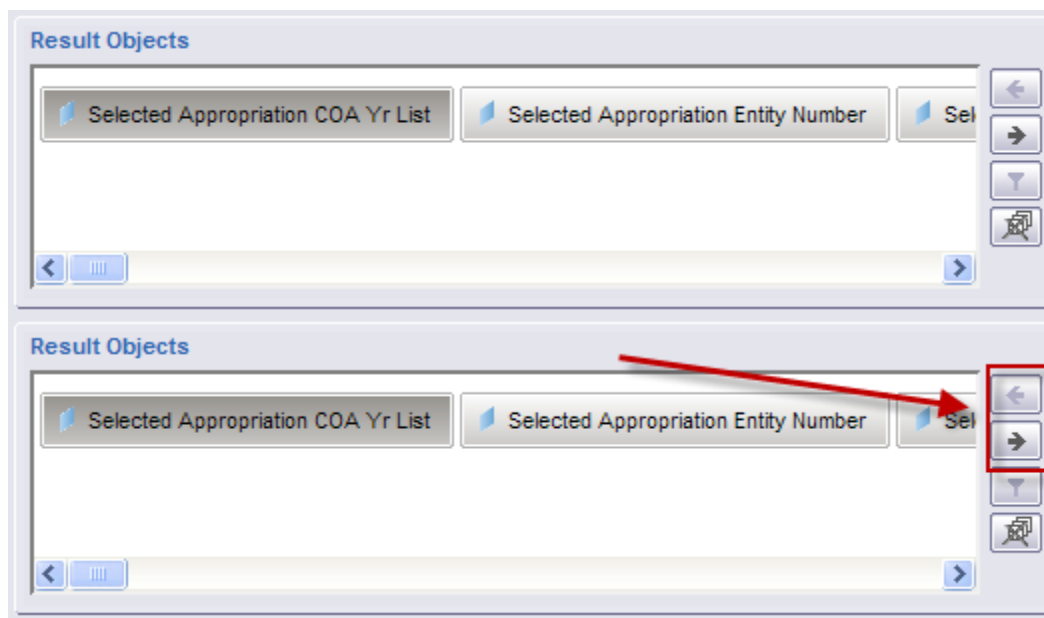
- Looking for dollar amounts?
Financial Activity/Financial Line/**Amounts**
- Looking for Selected dimensions?
Financial Activity/**Selected Objects**

- Looking for relative reporting items? Predefined filters are located at:
Financial Activity/Financial Line/General Financial Objects/**Relative Reporting**
- Can't find an object in a specified folder or it doesn't fit in any category? Try
Financial Activity/Financial Line/**General Financial Objects**, or
Financial Activity/Financial Line/**Transaction (FIN)** and it's subfolders

Another way to find objects in the universe is to use the **find option** located at the top of the universe panel. Type in the name of the object you are searching for and it will take you to the first instance, folder or object. Continue pressing the find icon and it will continue searching much like windows applications.

Result Objects Panel Discussion:

Any data object that you might want to display on the face of your report must be placed in the Result Objects panel. The objects in this panel become the Available Objects within your report.



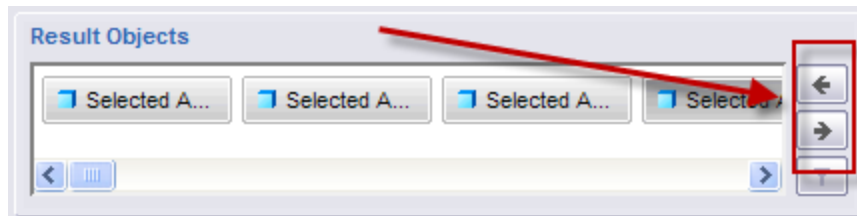
Enterprise Reports have a lot of available objects on them. The reports were designed to accommodate most Interactive Users and Report Viewers. These types of users can not add data objects to reports, but can access the information if the data object is already available to the report.

You can arrange objects within the Result Objects panel:

- Arrangement does not affect how objects get displayed in the report
- Makes it easier to see that you have all the objects you need within groups
- Hover over an object and the full object name is displayed

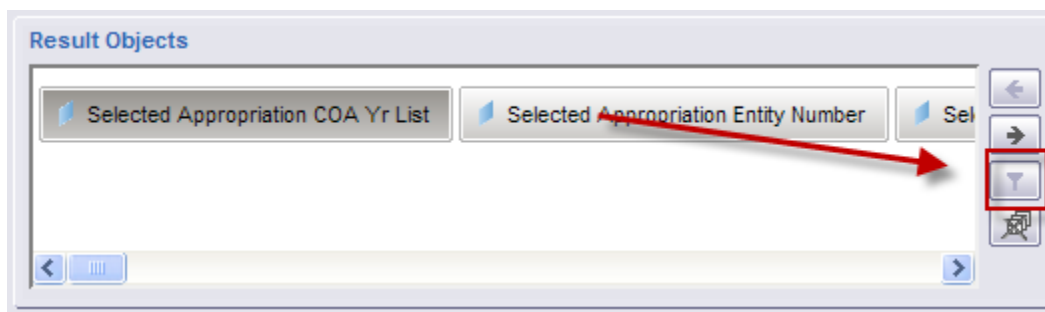
To move an object within the Result Objects panel:

- Drag and drop object to new position, or
- Click on an object and use the right or left arrow buttons



To create a filter from an object within the Result Objects panel.

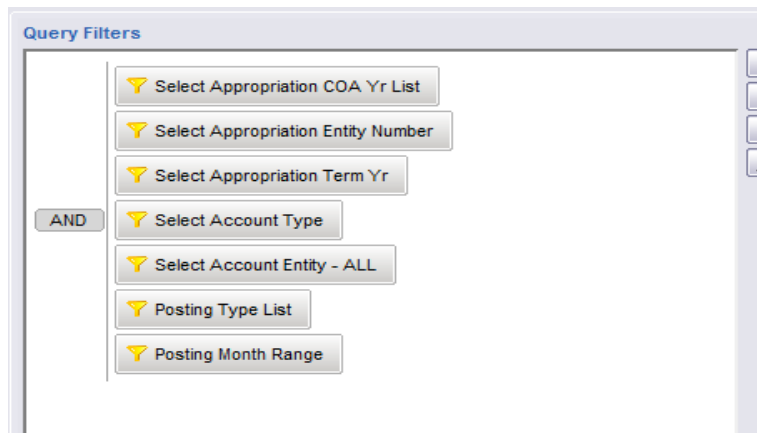
- Not all objects can be converted to a filter
- Click on an object in the Results Object panel
- When the Quick Filter turns from grey to black, it can be converted
 - The filter button takes a dimension, measure or detail and adds it to the query filters panel
 - It does not remove the object from the Result Objects panel it creates a new object in the Query Filters panel



- Click on the Quick Filter and the object pops into the Query Filters panel below and it is ready to define the filter

Query Filters Panel Discussion:

The Query Filters panel is used to limit the information being retrieved from the data warehouse.



There are three different types of filters that can be used within the Query Filters panel:

1. **Y Predefined Filters** (information selectors) – objects defined within the universe to filter data retrieved by the query from the data warehouse. These filters have predefined parameters

2. **User Defined Prompted** Filters – These can be dimensions, measures, or details and creates a prompt when Run Query or Refresh Data buttons are selected
3. **User Defined Unprompted** Filters – These can be dimension, measures, or details. Only a report developer can change how this filter is defined

Summary:

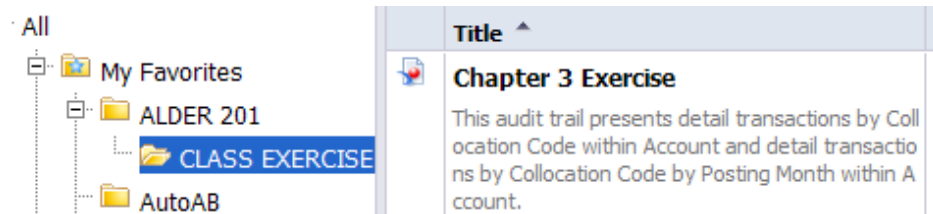
After completing this chapter, you are now able to:

- Access the Edit Query panel
- Identify the three different panels within Edit Query
- Identify Information Classes within the Universe
- Identify Universe Objects
- Arrange Objects within the Result Objects panel
- Identify the different types of filters

Exercise:

Instructions:

1. Add a New Folder under your ALDER 201 folder titled CLASS EXERCISES.
2. Verify that your new folder has been added.
3. From the Enterprise Audit Trail folder locate and open (double click) the report titled **Balance Sheet Detail Transactions for Account.**
4. Save this report to the CLASS EXERCISE folder as **Chapter 3 Exercise.**
5. Verify that the report was saved to your new folder.



6. Where are all of the data objects that you might want to report on located?
7. Where would you put data objects that you want to be available on your report?
8. Where do you limit the information being retrieved from the data warehouse?
9. What are the different types of filters?
10. What are the different types of objects?
11. Using the report you just copied, identify the Predefined Filters in the Query Filters panel.
12. Is the User Defined Filter prompted or unprompted?

13. Find the following objects in the Universe panel and identify what folder you found each one in: **Note:** Object names listed below are as they appear in the Universe. Objects can sometimes be found in multiple folders.

- a. Acct Type
- b. CC Code/SY
- c. Open Item Num
- d. Input RD Code
- e. Date Processed
- f. Total Authorized
- g. Select Grant Entity Number
- h. Selected Grant Entity Number

CHAPTER 4

Adding and Removing Objects

Goals and Objectives

Developing a Report Plan

Removing Objects

Adding Objects

Goals and Objectives:

After you complete this chapter, you will be able to:

- Develop a Report Plan
- Find an Enterprise Report that will work with the plan
- Modify the Result Objects to fit the plan

Report Plan:

It is strongly recommended before you ever open, create, or change a report that you have a report plan in place. A report plan consists of:

- What reporting structures do I want to report on?
- What account type do I want to report on?
- What posting type do I want to report on? (Budgets, Actuals, Encumbrances, etc.)
- What is the timing period that I want to report on? (Posting Months, Chart of Account Years, etc.)

Scenario:

You have been asked to develop a report that shows actual expenditures by contract with detail. This report should cover the entire fiscal year for 2011. You know that an Enterprise Report probably exists that you can use. Once you open the report, you realize that there are a lot of objects listed on the report that your department does not use. This report will be used in the future, so remove any unnecessary objects and add any that will be needed.

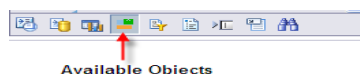
Develop a report plan based on the scenario above.

- Reporting Structure
- Account Type
- Posting Type
- Timing Period

Find and copy **Detail Transactions for Contract** to your ALDER 201 folder. Open the report from your ALDER 201 folder.

Refresh the data using the following prompts:

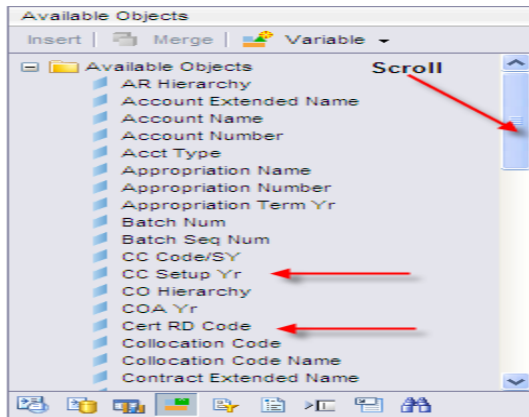
- COA Yr 2011
- Contract Number 51000
- Account Type EX
- Account Entity 70201
- Posting Type 1
- Posting Months 1 – 18



In the Report panel, select **Available Objects**.

Scroll through the list. This is an Enterprise report and there are a lot of available objects listed

Before adding or removing objects, scroll through the report and notice that some of the objects we want to remove are being displayed on the face of the report.



Click Edit Query

Removing Objects:

There are three ways to remove objects from the Result Objects panel:

1. Arrow out
2. Delete key
3. Drag and Drop

After our review, we have determined that we do not need the following objects in our report:

CC Setup Yr	Cert RD Code	FQA Financial Source	Financial line Desc
Fund Name	Fund Number	Open Item Line Num	Open Item Num
Open Item type	Program Indicator	Program Number	Source System ID
Transaction Desc L1			

Note: There is not an **undo** button, so make sure you know which object you are removing!

Find the objects listed above and remove them from the Result Objects panel.

Adding Objects:

There are three ways to add an object to Result Objects panel:

1. Arrow In
2. Drag and Drop
3. Double Click

We have also determined that we need to add the following objects to our report:

Fed FY Contract FQA Contract FQO

Find the objects listed above in the Universe panel and add them to the Result Objects panel.

Run Query

Scroll through the list of Available Objects and verify that you have removed all the objects listed above. Also, verify that the objects you added are in the list.

Insert 3 blank columns on your report after the Document Num column.

- Drag the object Fed FY into the first blank column you created
- Drag the object Contract FQO into the second blank column you created
- Drag the object Contract FQA into the third blank column you created

Save the report to your ALDER 201 folder as **Detail Transactions for Contract Add/Remove Objects**.

Summary:

After completing this chapter, you are now able to:

- Develop a Report Plan
- Find an Enterprise Report that will work with the plan
- Modify the Result Objects to fit the plan

Exercise:

Instructions:

1. Find and save a copy of **Detail Transactions for Appropriation** to your CLASS EXERCISE folder
2. Open the report from your CLASS EXERCISE folder
3. Refresh data:

Select COA Yr:	2011
Select AR Number:	15320
Select AR Term Year:	2011
Select Account Type:	EX
Enter Account Entity:	70200
Select Posting Type(s):	1;4;5;6;7
Starting Posting Month:	1
Ending Posting Month:	18
Run Query	
4. Review report and find Input RD Code column
5. In the Available Objects find Cert RD Code not displayed on the report
6. Click on Edit Query
7. In the Result Objects panel, remove the Input RD code and Cert RD code dimension objects
8. Run Query, using the same prompts
9. Review report, verifying that the objects removed are no longer in the list of available objects, and that Input RD is not on the report
10. Click on Edit Query
11. Add the objects Account Logical Level and Appropriation FQA to the Results Objects panel
12. Find both objects and populate the Result Objects panel
13. Run Query, using the same prompts
14. Review the Available Objects list to verify the new objects are on the report
15. Right Click on the Data Table and select Format Table
16. Using the Pivot table tab, place the object Account Logical Level in column 2; place Appropriation FQA in the column before CC Code/SY
17. Click OK and review the table to make sure your new objects are in the correct columns
18. Save this report as **Chapter 4 Exercise** to your CLASS EXERCISES folder

CHAPTER 5

Modify Query Filters from Range to List

Goals and Objectives

Identify Filter Types

Modify Query Filters – ranges to list

Goals and Objectives:

After you complete this chapter you will be able to:

- Identify types of filters
- Modify the Query Filters from range to list


Introduction:

ALDER has the ability to pull data in many different formats.

- Information requests from ALDER should be designed to increase efficiency which will enable your reports to run faster
- Request only information that is needed in a report. It is easy to add objects at a later date to a report

Identify Filter Types:

In ALDER there are three different types of filters:

1. **Query Filters** - Allow the user to limit the amount of data retrieved from the data warehouse. There are two types of Query Filters:
 - Pre-defined Query Filters based on objects in the Universe panel 
 - Filters built by report developers
2. **Report Filters** – Allow the user to restrict the data displayed on the entire report. These types of filters are applied to all tables and charts within a report
3. **Table/Chart Filters** – Allow the user to limit the data displayed on individual tables or charts

All but pre-defined filters are defined on dimensions, measures, details, and variables that are listed within the Available Objects menu in the Report panel.

Note: Variables can be used in filters to help the report developer achieve necessary results not provided by standard filters. In chapter 11 we will illustrate this.

Scenario:

Your department has found a report that allows them to select a range of ledger codes but the program managers in the department would like the report modified to select a specific ledger code. They want to know if the report can be modified to accommodate their request.

Changing a report from Range to List:

- Find and copy **Detail Transactions for Ledger Code** to your ALDER 201 folder
- Open report from ALDER 201 folder
- Maximize real estate
- Refresh Data with the following prompts:

Select COA Year:	2011
Select Beginning Ledger Code:	02000100

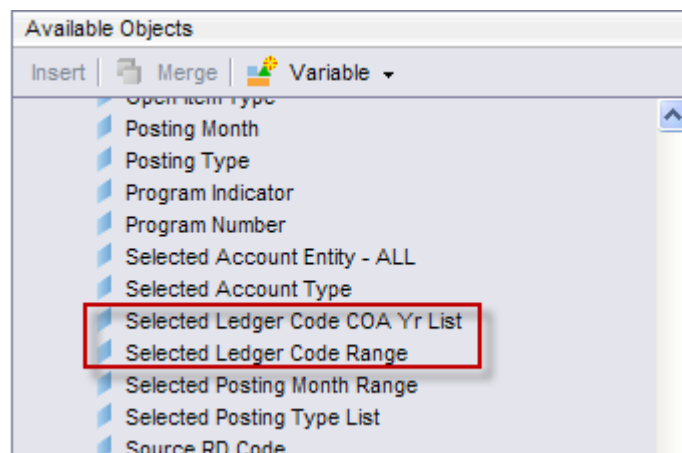
Select Ending Ledger Code:	02000200
Select Account Type:	EX
Enter Account Entity or Enter ALL:	70200
Select Posting Type(s):	1;4;5;6;7
Starting Posting Month:	1
Ending Posting Month:	3

- Run Query
- Save the report in your ALDER 201 folder as **Detail Transactions for Ledger Code in List**

Modify Query Filters:

Review the report results and notice that we now have a range of ledger codes listed in the header box (prompt selection). Because this report is sectioned by ledger code you can also use the navigation map (Report panel) and see the ledger codes that appear on the report.

In the Report panel select **Available Objects**. Scroll through the list until you find the objects “Selected Ledger Code Range” and “Selected Ledger Code COA Year List”.



- Edit Query
- From the Query Filters panel remove:
 - Select Ledger Code COA Yr List
 - Select Ledger Code Range
- From the Result Objects panel remove:
 - Selected Ledger Code COA Yr List
 - Selected Ledger Code Range

Note: If you do not remove the selected ed objects from the Result Objects panel, you will still be prompted for these objects when you run the query. Even though you are being prompted for these items, you are not filtering on the objects.

- From the Universe panel
- Add the following objects to the Query Filters panel:

Select COA Yr List

Select Ledger Code List

- Add the following objects to the Results Objects panel:

Selected COA Yr List

Selected Ledger Code List

- Run Query with the following prompts:

Ledger Codes 02000100 and 02000115

Notice the difference in the prompt box?

BEFORE Changes

Prompts	
Reply to prompts before running the query.	
✓	Select COA Yr: 2011
✓	Select Beginning Ledger Code: 2000100
✓	Select Ending Ledger Code: 20001200
✓	Select Account Type EX
✓	Enter Account Entity or Enter ALL for All: 70200
✓	Select Posting Type(s): 1;4;5;6;7

AFTER Changes

Prompts	
Reply to prompts before running the query.	
✓	Select COA Yr: 2011
✓	Select Ledger Code(s): 2000100;2000115
✓	Select Account Type EX
✓	Enter Account Entity or Enter ALL for All: 70200
✓	Select Posting Type(s): 1;4;5;6;7

Notice that our report header box now has blank rows. This is because the header box displayed the “Selected Ledger Code Range” and the “Selected Ledger Code COA Yr”. Those objects were removed from our report.

- Update the header box by dragging and dropping the following objects into the gray area:

Selected COA Yr

Selected Ledger Code List

Save the report to your ALDER 201 folder with the **same title**

Summary:

After completing this chapter, you are now able to:

- Identify filter types
- Change reports from ranges to lists

Exercise:

Instructions:

1. Find and save a copy of the Enterprise report **Detail Transactions for Collocation Code** to your CLASS EXERCISE folder
2. Open the report from your CLASS EXERCISE folder
3. Refresh the report:

Select COA Yr:	2011
Select Beginning Collocation Code:	45000000
Select Ending Collocation Code:	45999999
Select Collocation Code Set-up Year:	2011
Select Account Type:	AA
Enter Account Entity:	ALL
Select Posting Type(s):	1;4;5;6;7
Starting Posting Month:	1
Ending Posting Month:	18
Run Query	
4. Notice that the report is asking for a range of Collocation Codes. You would like to change this report to ask for a specific list of Collocation Codes rather than a range
5. Edit Query
6. In the Query Filters panel, remove:
 - a. Select Collocation Code Range
 - b. Select Collocation Code COA Yr List
7. From the Universe panel, find and place in the Query Filters panel:
 - a. Select COA Yr List
 - b. Select Collocation Code List
8. In the Result Objects panel, find and remove:
 - a. Selected Collocation Code COA Yr List
 - b. Selected Collocation Code Range
9. In the Universe panel, find and add in the Result Objects panel:
 - a. Selected COA Yr List
 - b. Selected Collocation Code List
10. Run Query with the following prompts:

a. Select Collocation Code List	45141630 and 45141640
b. Select COA Yr	2011
11. Populate the Header Box by dragging and dropping the new objects in the grey areas or by removing the blank rows and inserting the new objects:
 - a. Selected Collocation Code List
 - b. Selected COA Yr
12. Save the report to your CLASS EXERCISES folder as **Chapter 5 Exercise**

CHAPTER 6

Change Report Type

Goals and Objectives

Change Query Filters and Result Objects

Rename Query Tab

Goals and Objectives:

After you complete this chapter, you will be able to:

- Change Query Filters
- Renaming Query Tabs

Introduction:

The purpose of changing a report type will vary between users. Changing Query Filters allows the user to define the type of data they need for a specific purpose. This chapter will show the user how to change Query Filters and define the report parameters by different structures/entities.

Scenario:

Your program managers have found an enterprise report that they would like to have changed to accommodate their reporting needs. They would like to see the report sectioned by appropriations that report to an organization structure. We believe we can change this report type entity from Appropriation to Organization.

- Open **Detail Transactions for Appropriation** from your ALDER 201 folder
- DO NOT REFRESH REPORT
- Edit Query

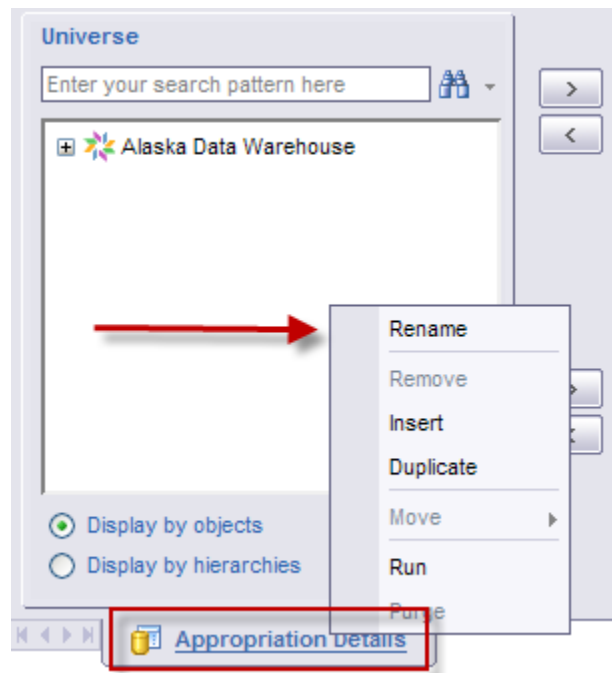
Change Query Filters and Result Objects for Reporting Entity:

- From the Query Filters panel remove:
 - Select Appropriation COA Yr List
 - Select Appropriation Entity Number
 - Select Appropriation Term Yr
- From the Result Objects panel remove:
 - Selected Appropriation COA Yr List
 - Selected Appropriation Entity Number
 - Selected Appropriation Term Yr
 - Select Appropriation Name (Dimension)
- From the Universe panel add the following objects to the Query Filters panel:
 - Select COA Yr list
 - Select Organization Entity Number
- From the Universe panel add the following objects to the Result Objects panel:
 - Selected COA Yr List
 - Selected Organization Entity Number

- From the Universe panel add the following objects to the Result Objects panel:
 - OR Hierarchy
 - Organization Extended Name
 - Organization Number
 - Organization Name
 - Organization Logical Level
 - Select Organization Name (Dimension)

Rename Query Tab:

- Rename Query to OR by AR



- Be careful not to name the query the same name as a universe object
- Run Query using the following prompts:

Select COA Yr	2011
Select OR number	09100
Select Account Entity	70200
- Update header box with:
 - Selected COA Yr List
 - Selected Organization Entity Number
 - Select Organization Name
 - Delete unused rows and update the text in the blue boxes where necessary

Save the report to your ALDER 201 folder as **Detail Transactions for Organization by Appropriation.**

For detailed information on changing and formatting sections please see ALDER 101, Chapter 9.

Document Structures and Filters

- Notice on the Document Structures and Filters that the information is still sectioned on Appropriation

Web Intelligence - Detail Transactions for Organization

Document View 100% 1 /1+ |

Document Structure and Filters

Filter Remove Format

Detail Transactions for Organization

OR by AR

AND

- Select COA Yr List
- Select Organization Entity Number
- Select Account Type
- Select Account Entity - ALL
- Posting Type List
- Posting Month Range

OR by AR

- Page Header
- Page Body
 - Horizontal Table: UserResponse
 - Vertical Table: Block3
 - Section COA Yr
 - Vertical Table: Block3
 - Vertical Table: Block4
 - Section Appropriation Extended Name
 - Vertical Table: AR
 - Vertical Table: Block1
 - Vertical Table: Block2
- Page Footer
- OR by AR by CC by AC
- OR by AR by CC by AC Excel

COA Year	2011
Organization Number	09100
Organization Name	DIVISION OF FINANCE
Account Type(s)	EX
Account Number	70200
Posting Type(s)	1, 4, 5, 6, 7
Posting Month(s)	1 - 18

Chart of Account Yr: 2011

Appropriation: 07598-12 FIXED ASSET ACCTG-PB

Account	Document Num	Trans Code	Date Processed
73805 - I/A IT NON-TELECOM	AA23770360003	430-40	02/17
73805 - I/A IT NON-TELECOM			
TOTAL APPROPRIATION 07598-12 FIXED ASSET ACCTG-PB			

Summary:

After completing this chapter, you are now able to:

- Change report type entity
- Renaming query tabs

Exercise:

Instructions:

1. Find and copy the **Detail Transactions for Grant** to your CLASS EXERCISE folder. ****Do NOT Refresh Report****
2. Open the report from your CLASS EXERCISE folder
3. Edit Query.
4. Add Query Filters objects:
 - a. Select COA Yr List
 - b. Select Project Entity Number
5. Add Header Box Result Objects:
 - a. Selected COA Yr List
 - b. Selected Project Entity Number
 - c. Select Project Name
6. Add additional Result Objects:
 - a. PJ Hierarchy
 - b. Project Extended Name
 - c. Project Number
 - d. Project Name
 - e. Project Logical Level
7. Remove Query Filters objects:
 - a. Select Grant COA Yr List
 - b. Select Grant Entity Number
8. Remove Result Objects:
 - a. Selected Grant COA Yr List
 - b. Selected Grant Entity Number
9. Rename Query to PJ Detail
10. Run Query using the following prompts:

a. Select COA Yr List	2011
b. Select Project Number	41000
c. Enter Account Entity or enter ALL	70200
d. Ending Posting Month	1
11. Update the Header Box with the following objects and rename them accordingly:
 - a. Selected COA Yr List
 - b. Selected Project Entity Number
 - c. Select Project Name
12. Update the Description, and Keywords from Grant to Project, remember that this is a Detail Transactions for Project by Grant
13. Save the report in your Class Exercises folder as **Chapter 6 Exercise**

CHAPTER 7

Modify Query to Filter on Dimensions, Measures and Nested Filters

Goals and Objectives

Query Filters Types:

- Prompted Filters
- Predefined
- User Defined

Unprompted Filters

- Filter Data on a Dimension
- Filter Data on a Measure

Nested Filters

Effects in Document Structures and Filters


Goals and Objectives:

After you complete this chapter, you will be able to:

- Identify Prompted vs. Unprompted Filters
- Filter on Dimensions and Measures
- Create a Nested Filter

Query Filters Types:

There are three different types of filters that can be used within the Query Filters panel:

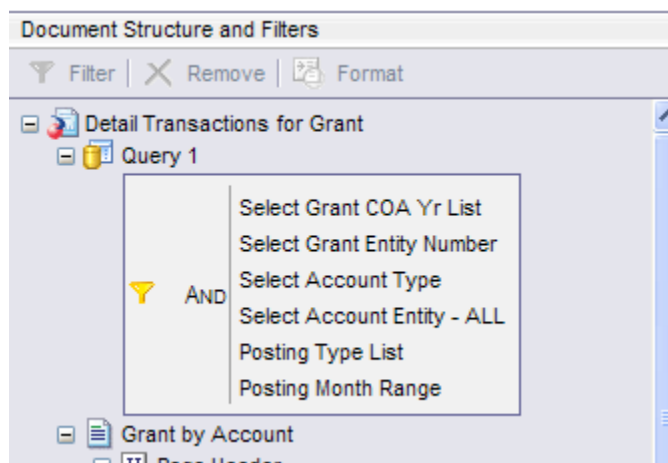
1.  **Predefined Filters** (information selectors) – objects defined within the universe to filter data retrieved by the query from the data warehouse. These filters have predefined parameters and efficiently retrieve data from the warehouse. You should always look for a predefined filter first
2. **User Defined Prompted Filters** – These can be dimensions, measures or details and creates a prompt when Run Query or Refresh Data buttons are selected
3. **User Defined Unprompted Filters** – These can be dimensions, measures, or details. Only a report developer can change how this filter is defined

Find and copy **Detail Transactions for Grant** to your ALDER 201 folder. Open the report from your ALDER 201 folder.

Refresh Data and update the following prompts:

COA Yr	2011
Account Entity	70200
Posting Type	1

In the Report panel, view Document Structures and Filters. See how the Query Filters is defined.



Unprompted Filters:

Filter Data on a Dimension:

In the report, view the Date Processed Column. See that there are several days 10/12/2010 in account 73970. Also note how many pages the report currently has.

	AA23286810006	145-90	09/15/2010	03	18128
73802 - I/A DISASTER RELIEF					
73970 - CONTRACTUAL COST TRF	AA23455760004	430-10	09/30/2010	03	09356
	AA23487650008	430-10	10/12/2010	04	09330
	AA23487650009	430-10	10/12/2010	04	09330
	AA23487650012	430-10	10/12/2010	04	09330
	AA23487650013	430-10	10/12/2010	04	09330
	AA23487650014	430-10	10/12/2010	04	09330
	AA23487650015	430-10	10/12/2010	04	09330
	AA23487650015	430-10	10/12/2010	04	09330
	AA23487650016	430-10	10/12/2010	04	09330
	AA23488020010	430-10	10/12/2010	04	09330
	AA23488020013	430-10	10/12/2010	04	09330
	AA23488020014	430-10	10/12/2010	04	09330

Click Edit Query.

Find the dimension Date Processed (Financial Activity/Financial Line/Transaction(FIN)/General Transaction (FIN) Objects) and drag the object to the bottom of the Query Filters panel.

Query Filters

AND

In List

Notice that the object defaults to In List (depending upon your ALDER preferences).

In List

We want to filter the data for dates on or after December 15, 2010.

- Change the Operator to Greater than or Equal to
- In the Value 1 box, type 12/15/2010 (you must have the exact format for this object)
- Define filter type: Constant



- Run Query
- Run Query without changing prompts

In the report, view the Date Processed column. See that the dates in account 73970 start with 02/02/2011. Also note how many pages the report now has.

Account	Document Num	Trans Code	Date Processed	Posting Month
72970 - TRAVEL COST AJE XFER	AA23651920001	430-10	12/21/2010	06
72970 - TRAVEL COST AJE XFER				
73970 - CONTRACTUAL COST TRF	AA23748770001	430-10	02/02/2011	08
	AA23748770002	430-10	02/02/2011	08
	AA23748770003	430-10	02/02/2011	08
	AA23754930001	430-10	02/04/2011	08
	AA23754930001	430-10	02/04/2011	08
	AA23754930003	430-10	02/04/2011	08
	AA24016200001	430-10	05/20/2011	11
	AA24016200001	430-10	05/20/2011	11

Since you are filtering this information at the Query level, you will want to update your Header Box to let the report users know that this filter exists.

COA Year	2011
Grant	35037
Account Type(s)	EX
Account Number	70200
Posting Type(s)	1
Posting Month(s)	1 - 18
Filtered by:	Date Processed >= 12/15/2010

Save the report to your ALDER 201 folder as **Detail Transactions for Grant V1**.

View the Actual column. We are going to place a filter in the query limiting our data to amounts greater than \$1,000.

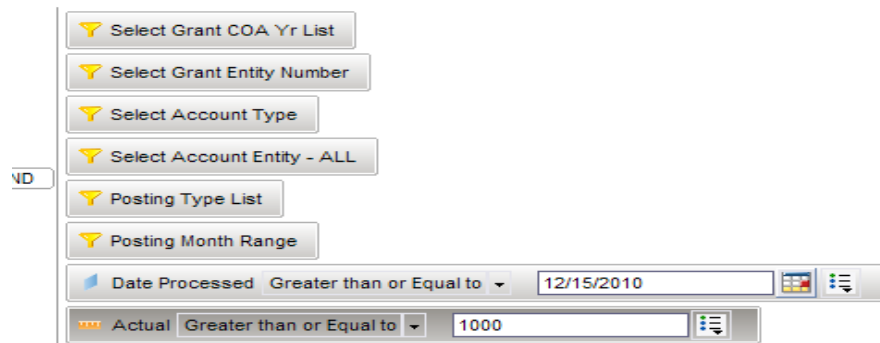
Edit Query.

Filter Data on a Measure:

Find the measure Actual and drag the object to the bottom of the Query Filters panel.

- Change the Operator to Greater than or Equal to
- In the Value 1 box, type 1000 (do not use \$ sign)
- Define filter type: Constant

When you are done, your Query Filters panel objects should look like this:



- Run Query
- Run Query without changing prompts

In the report, view the Actual column. See that the amounts are no longer under \$1,000. Also note how many pages the report now has.

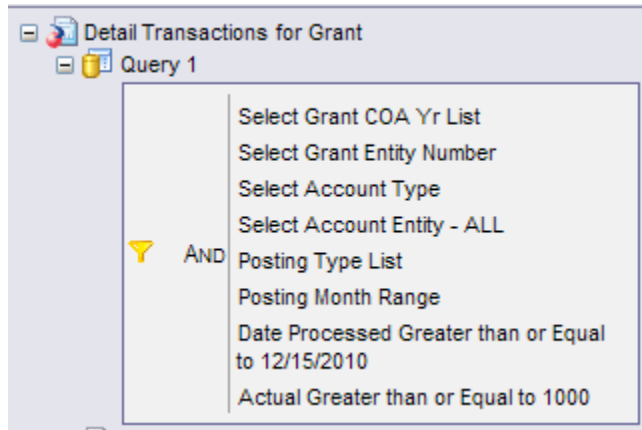
Update the Header Box.

COA Year	2011
Grant	35037
Account Type(s)	EX
Account Number	70200
Posting Type(s)	1
Posting Month(s)	1 - 18
Filtered by:	Date Processed >= 12/15/2010
	Amounts >=\$1,000.00

Save the report to your ALDER 201 folder as **Detail Transactions for Grant V2**.

In the Report panel, select Document Structures and Filters.

Notice how the Query Filters have been updated.

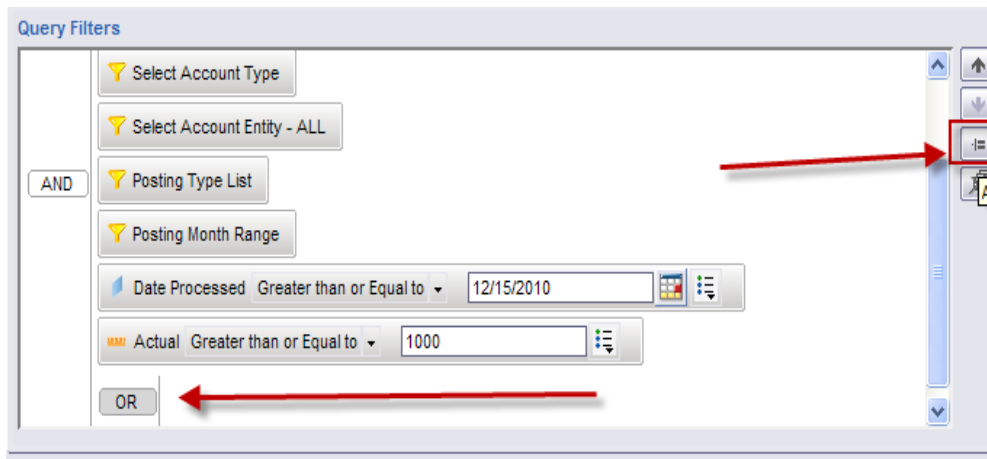


Nested Filters:

The purpose of a Nested Filter is to limit or define the data being displayed on a report based on multiple sets of criteria. In this example, we want to filter on Date Processed OR Actual.

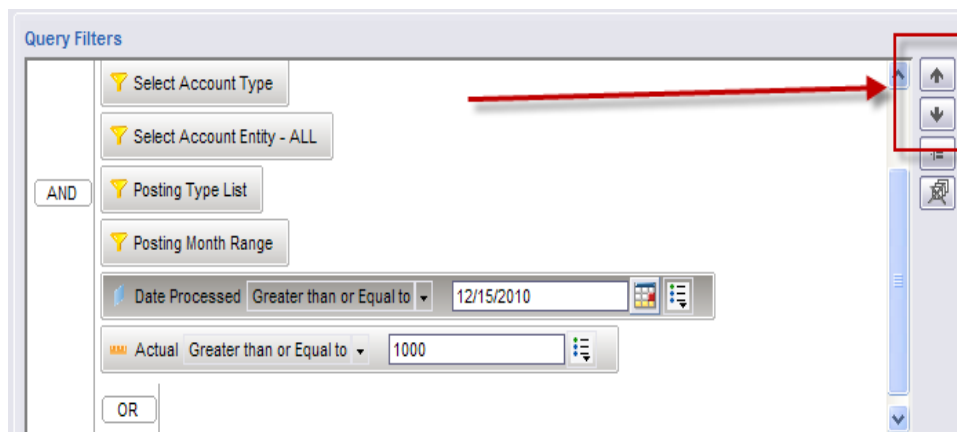
Edit Query

In the Query Filters panel, select the last filter in the list of filters. Select the Nested Filter button next to the Query Filters panel. Once it has been selected, notice that ALDER has added an OR into the Query Filters panel.

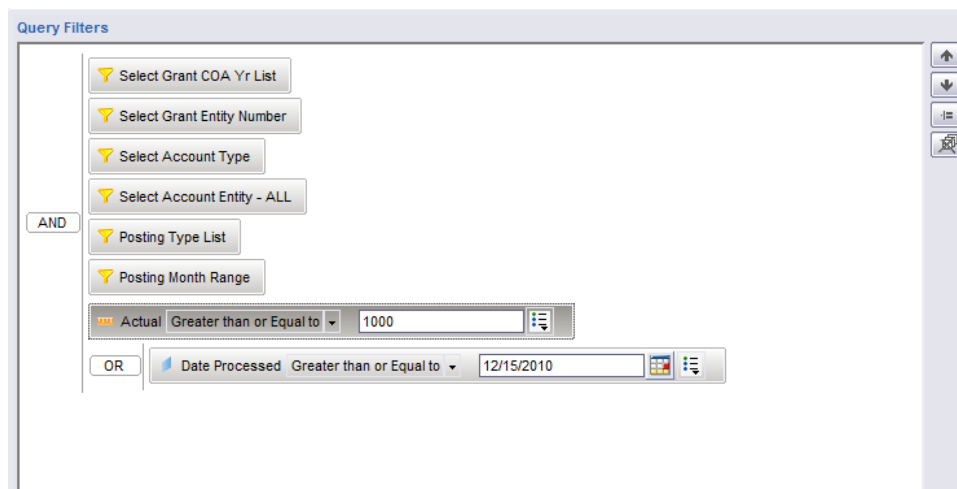


In the Query Filters panel, select the object Date Processed Greater than or Equal to.

Using the Up/Down Arrows, move the object next to the OR statement.

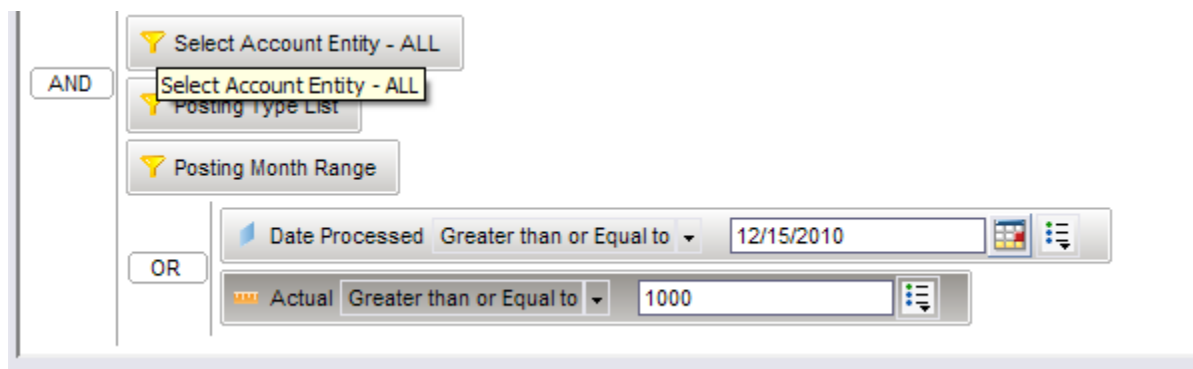


This is what the Date Processed should look like when it has been moved next to the OR statement



In the Query Filters panel, select the object Actual Greater than or Equal to 1000.

Using the Up/Down Arrows, move the object next to the OR statement.



Run Query

Run Query without changing prompts

Update the Header Box

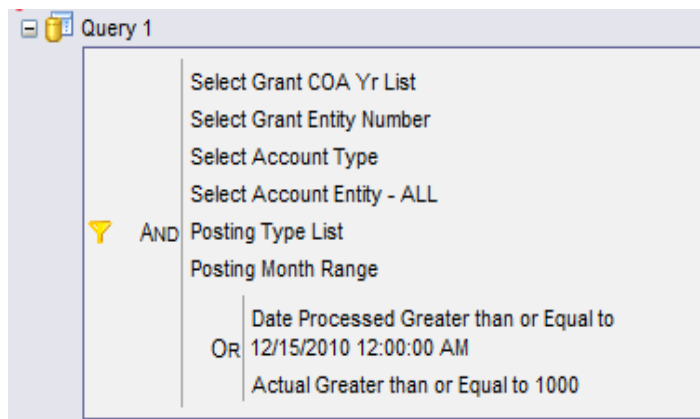
COA Year	2011
Grant	35037
Account Type(s)	EX
Account Number	70200
Posting Type(s)	1
Posting Month(s)	1 - 18
Filtered by:	Date Processed >= 12/15/2010
OR	Amounts >= \$1,000

Save the report in your ALDER 201 folder as **Detail Transactions for Grant Nested Filters**.

Effects in Document Structures and Filters:

In the Report panel, select Document Structures and Filters.

Notice how the Query Filters has been updated:



SEE APPENDIX for definitions of OPERATORS and additional examples of Nested Filters!

Note: When using filters, you should always verify your information with AKSAS.

Summary:

After completing this chapter, you are now able to:

- Identify Prompted vs. Unprompted Filters
- Filter on Dimensions and Measures
- Create a Nested Filter

Exercise:

Scenario:

Employees who work on contracts in your section have come to you requesting two reports. One report that provides contracts with only reimbursable service agreement (RSA) information and data for only collocation codes (CC) with a set up year of 2009 or greater. The second report they would like to see either of the two criteria (RSA or CC setup years).

1. Find and copy **Detail Transactions for Contract** to your CLASS EXERCISE folder
2. Open the report from your CLASS EXERCISE folder
3. Change the following prompts:
 - a. Select COA Yr: 2010
 - b. Select Account Type: RR
 - c. Select Account Entity: 50000
4. Run Query
5. After reviewing the report, you decide you only want to see certain types of transactions on this report
6. Edit Query
7. Go to the Universe and find the dimension “Trans Code” (Hint: look in Financial Activity/Transaction(FIN))
8. Drag the dimension onto your Query Filters panel
9. You don’t want to be prompted for this information each time that you refresh the data; therefore, set it as a filter (Define filter type: Constant)
10. You want to get all RSA transactions, so you will select trans codes 140-00 thru 145-99 (Hint: Between)

11. Run Query
12. Review report to verify that the data was filtered correctly
13. Update the Header Box

COA Year	2010
Contract	51000
Account Type(s)	RR
Account Number	50000
Posting Type(s)	1, 4, 5, 6, 7
Posting Month(s)	1 - 18
Filtered by:	Transaction Code 140-00 thru 145-99

14. Save to your Class Exercise folder as **Chapter 7 Exercise V1**
15. Now you need to add the second criteria that was requested, collocation codes with the setup year of 2009 or greater

16. Edit Query
17. Add the dimension CC Setup Yr to the Query Filters panel
18. Update the CC Setup Yr to be Greater than or Equal to 2009. This should be an unprompted filter

Query Filters

Select Contract COA Yr List

Select Contract Entity Number

Select Account Type

Select Account Entity - ALL

AND

Posting Type List

Posting Month Range

Trans Code Between 140-00 And 145-99

CC Setup Yr Greater than or Equal to 2009

Define filter type: Constant

19. Run Query and view the data
20. Update Header Box

COA Year	2010
Contract	51000
Account Type(s)	RR
Account Number	50000
Posting Type(s)	1, 4, 5, 6, 7
Posting Month(s)	1 - 18
Filtered by:	Transaction Code 140-00 thru 145-99
	CC Setup Yr >= 2009

21. Save the report to your Class Exercises folder as **Chapter 7 Exercise V2**
22. Now you need to create the second report that was requested, you only want to retrieve data from one of the new filters OR the other
23. Edit Query
24. Add a Nested Filter for the 2 dimension objects that you added to the Query Filters panel

Query Filters

Select Contract COA Yr List

Select Contract Entity Number

Select Account Type

AND

Select Account Type

Posting Type List

Posting Month Range

OR

Trans Code Between 140-00 And 145-99

CC Setup Yr Greater than or Equal to 2009

25. Run Query
 26. Review report to see what changed with the Nested Filter
 27. Update Header Box
- | | |
|------------------|-------------------------------------|
| COA Year | 2010 |
| Contract | 51000 |
| Account Type(s) | EX,RR |
| Account Number | 50000 |
| Posting Type(s) | 1, 4, 5, 6, 7 |
| Posting Month(s) | 1 - 18 |
| Filtered by: | Transaction Code 140-00 thru 145-99 |
| OR | CC Setup Yr >= 2009 |
28. Save the report to your Class Exercises folder as **Chapter 7 Exercise Final**

CHAPTER 8

Building a Report from Scratch using a Template

Goals and Objectives

Create a report utilizing a template

Creating and using a report plan

Paint a report

Add tables for section headers and section/report totals

Format Sections and Blocks

Goals and Objectives:

After you complete this chapter, you will be able to:

- Create a report utilizing a template
- Create a report plan
- Paint a report
- Add tables for section headers and section and report totals
- Format Section and Blocks

Introduction:

Before creating a report it is always a good idea to have a report plan in place. Know the entities you want to report on so that you can select your objects in a timely manner. You can save a report from the Edit Query function so you must have enough query filter objects in your report to run a query. Included in Chapter 4 was a “report plan” guideline that will help us with the upcoming process.

Scenario:

Your director has asked you to build a report based on collocation codes, he/she would like to see the expenses for the first quarter and he/she would also like to see these expenditures displayed by account for Chart of Account Year (COA) 2011.

Creating and Using a Report Plan:

A plan includes:

1. Entity Type (structure)?
Collocation Code
2. Timing Period?
COA Year 2011
Posting Month Range (3 months)
3. Accounts?
Expenditures (EX)
4. Posting types
Posting Type 1 (actual)

These will become your basic Prompts (Query Filters).

For quicker retrieval of data, we STRONGLY ENCOURAGE you to use the filter objects COA YR and Posting Month on all reports.

Based on the plan that we have just created, let's determine what Query Filters and Result Objects we need on the report.

Best practice for Query development:

- Start by creating a small, well-structured query; add more objects later
- Add objects to query that help to partition the database and optimize query performance such as COA YR; Posting Month; and Posting Type
- Objects placed in the Query Filters panel should have matching “Selected” object in the Result Objects panel. Selected items are used to populate the header box of the report.

1. What am I filtering on (Query Filters)?

Select COA Yr List
 Select Collocation Code Range
 Select Account Entity – ALL
 Select Account Type
 Posting Month Range
 Posting Type List

2. What do I want in my Header Box (selected objects)?

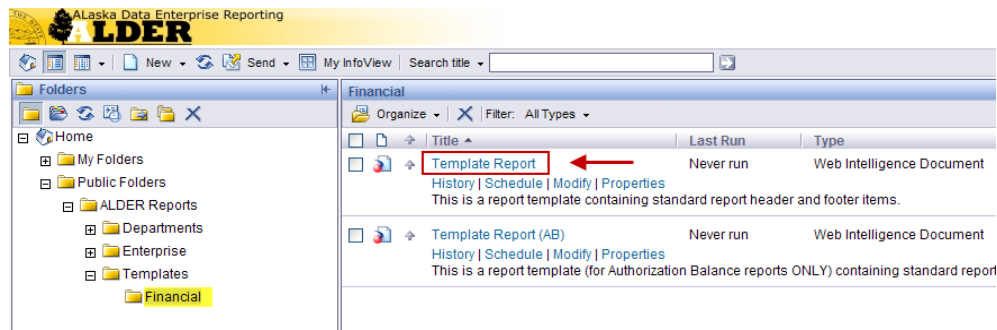
Selected COA Yr List
 Selected Collocation Code Range
 Selected Account Entity – ALL
 Selected Account Type
 Selected Posting Month Range
 Selected Posting Type List

3. What Available Objects do I want available to display in my data tables (dimension/measure/detail)?


Account Number
 Collocation Code Extended Name
 Ledger Code
 Posting Month
 Posting Type
 Actual

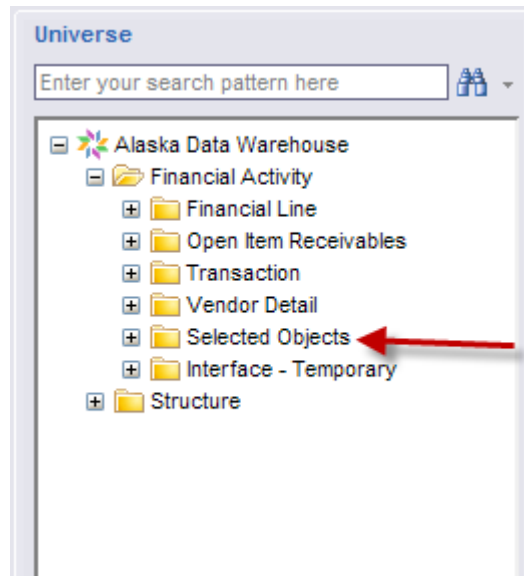
Create a Report Utilizing a Template:

- Find and copy the **Template Report** to your ALDER 201 folder (highlight folder for financial)

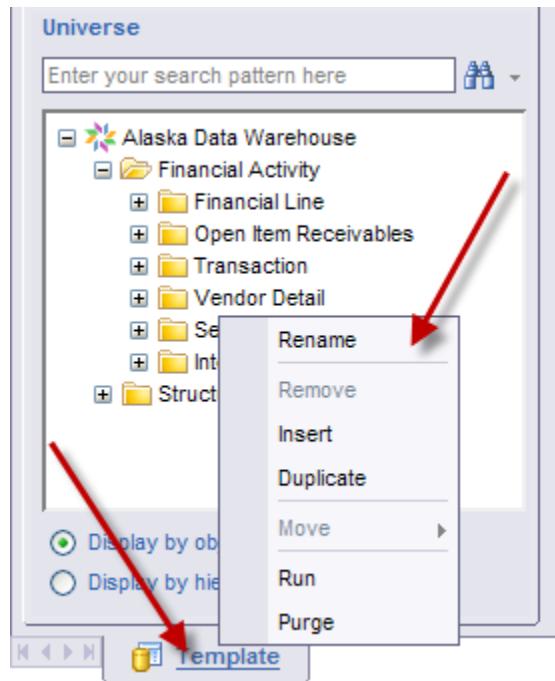


Note: there are two template reports available, make sure you select the one without the AB in the name.

- Open the report from your ALDER 201 folder
Notice that the template report has the same standard elements as all other ALDER reports
- Edit Query
- Maximize your real estate
- Add objects to the Query Filters panel  from page 47
(3 ways to add objects to panels, drag & drop, arrows, double clicking)
- Add Selected objects to the Result Objects panel from page 47



- Add dimension/measure/detail objects to the Result Objects panel from page 47
- Rename Query to CC Detail



- Be careful not to name the query the same name as a universe object
-
- Run Query with the following prompts:
- | | |
|-----------------------------------|----------|
| Select COA Year | 2011 |
| Select Beginning Collocation Code | 02400210 |
| Select Ending Collocation Code | 02400290 |
| Select Account Entity – ALL | 70200 |
| Select Account Type | EX |
| Select Posting Type | 1 |
| Starting Posting Month | 1 |
| Ending Posting Month | 3 |

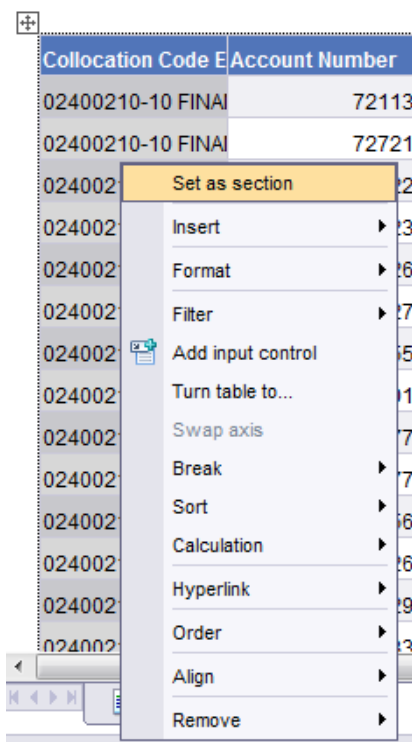
**Unless there is an error message that says no data retrieved the report will be blank until you paint the report with objects.

- Rename report tab as **CC Detail**
- Update Header Box:
 - Update your header box with “selected” objects
 - Rename blue boxes in Header Box
 - You may need to add or delete rows in the Header Box to accommodate the selected items in your new report format

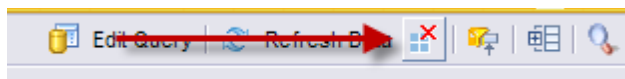
COA Yr	2011
CC Range	2400210 - 2400290
Posting Type	1
Posting Month Range	1 - 3
Account Type	EX
Account Entities	70200

Painting a Report:

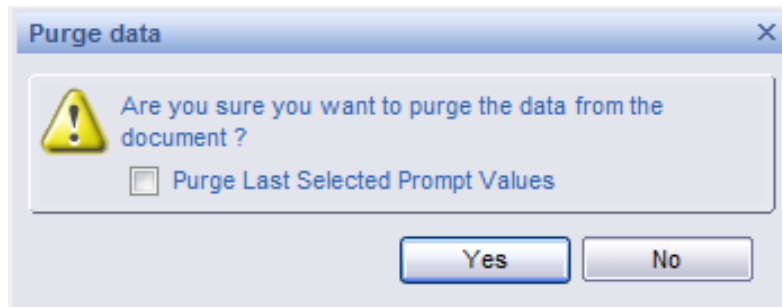
- Paint the report by adding available objects to data table:
 Collocation Code Extended Name
 Account Number
 Posting Month
 Posting type
 Actual
- Save the report to your ALDER 201 folder as **CC Detail V1**
- Set Collocation Code Extended name as Section



- Purge data from report using the Purge data icon

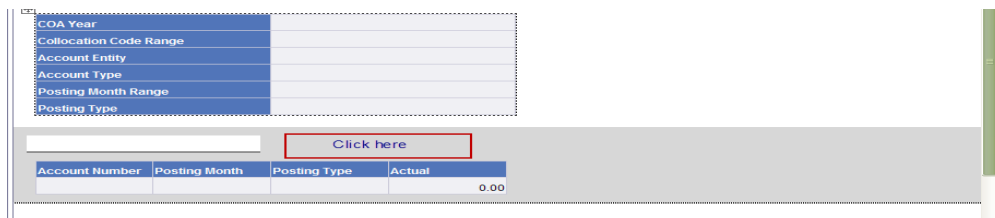


- When you select purge data, you will receive this warning. Be sure that the box is NOT checked or you will have to reenter your prompt data when you refresh the query. Select YES



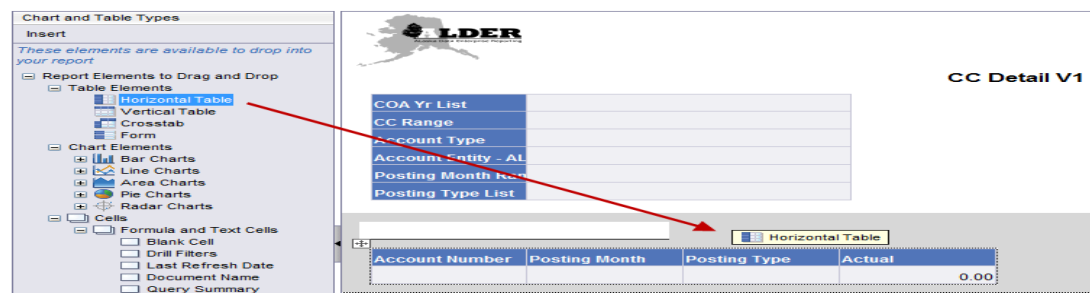
Adding Tables for Section Headers and Section/Report Totals:

- Click in the area next to the new section in the Workspace panel – notice the gray area on the report

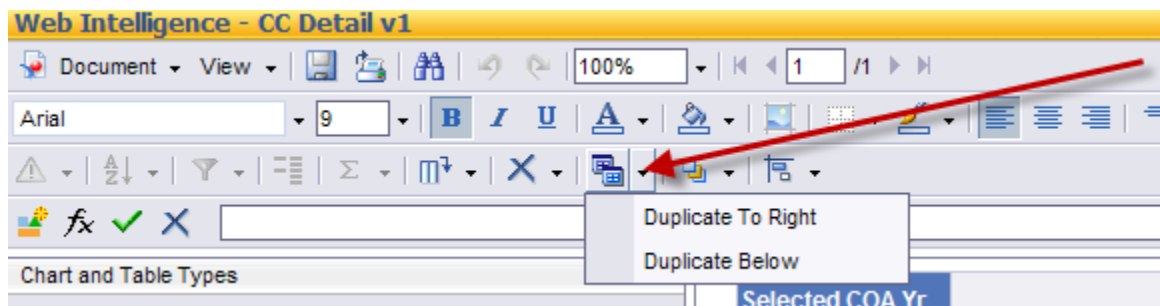


- Drag a horizontal table next to the section cell

Do not worry about the placement of this table. Later on in this chapter we will cover formatting the table and placing it on the report in its proper place.



- Click on the table that was just added
 - From the report toolbar find “Duplicate”



- Select from the dropdown menu “duplicate to right”
- This should have duplicated the table to the right of the existing table.
- These tables will be used to display the section header information and the section totals.

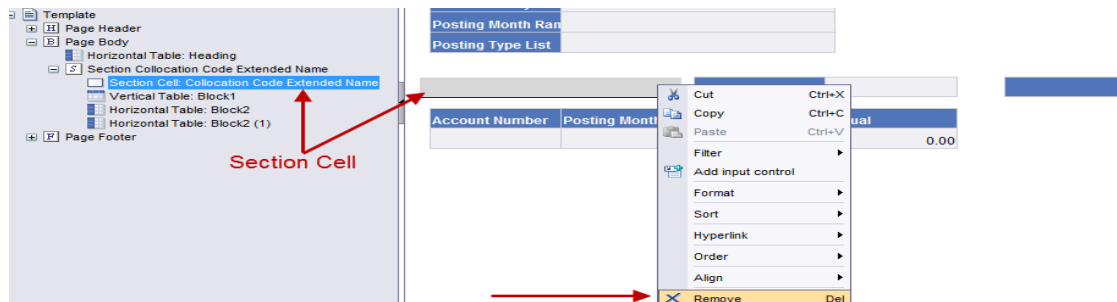
COA Yr List	
CC Range	
Account Type	
Account Entity - AL	
Posting Month Ran	
Posting Type List	

Duplicated table

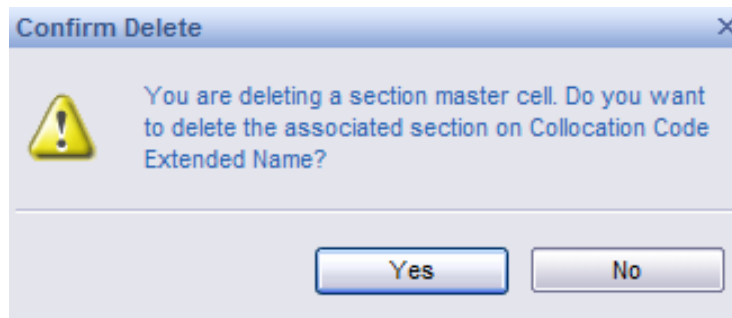


Account Number	Posting Month	Posting Type	Actual
			0.00

- Go to Document Structures and Filters in the Report panel
 - Find and select the Section Cell: Collocation Code Extended Name
 - Remove the Section Cell



- When you Remove the Section Cell, you will receive the following warning - SAY NO or you will remove the entire section you just created

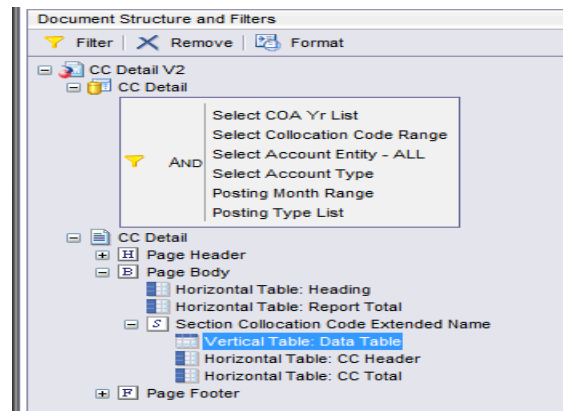


- Go to the Available Objects list in the Report panel
 - Drag the dimension “Collocation Code Extended Name” to the grey box in the first table
 - Change the blue box in this table to read “Collocation Code”
 - Drag the measure “Actual” to the grey box in the second table
 - Change this blue box to read “Total Collocation Code”
- Go to Document Structures and Filters in the Report panel
- Save the report as **CC Detail V2**

Format Section and Blocks:

Note: Highlight the table in the document structures and filters area to identify the table on the report

- Locate Collocation Code Data Table (this should be the only vertical table)
 - Format, Table
 - General Tab – Name the table “Data Table”
- Locate Collocation Code Header Table
 - Format
 - General Tab – Name the table “CC Header” (don’t forget to click “apply”)
 - Layout Tab
 - .0, Left Side of “Data Table” (don’t forget to click “apply”)
 - .12, Top Edge of Section
 - Apply
 - OK
- Locate Collocation Code Total Table
 - Format, Table
 - General Tab – Name the table “CC Total”
 - Layout Tab
 - .0, Left Side of “Data Table”
 - .12, Bottom side of “Data Table”
 - Apply
 - OK



Note: The total table is now at the bottom of the section and all of the tables are aligned with the Header Box.

- Drag the dotted line to bottom of CC Total table (to clean up white space)
- Click the space next to the header box and find the grey area under the new section, this is the bottom of the report
- Drag a horizontal table to bottom of the report

Collocation Code

Account Number	Posting Month	Posting Type	Actual
			0.00
Total Collocation C			0.00

Report Total 0.00

drag dotted line up

Add horizontal table for Report Total

- Drag available object “Actual” to the gray cell of new table
- Change the name in the blue cell to read “Report Total”
- Format, Table:
 - General Tab – Name the table “Report Total” (don’t forget to click “apply”)
 - Layout Tab
 - .20, Left Edge of Report
 - 3.37, Top Edge of Report
 - Apply
 - OK
- Refresh data
- Save the report to your ALDER 201 folder as **CC Detail Final**

Summary:

After completing this chapter, you are now able to:

- Create a scratch report utilizing a template
- Create a report plan
- Paint a report
- Add tables for section headers
- Add tables for section and report totals
- Format Sections and Blocks

Exercise:

Scenario:

You have federal grants that are tracked using ledger codes. An auditor has requested to see a detailed transaction listing for all expenditures in the 73000 line of account codes for COA Year 2011.

1. Find and copy the **Template Report** (remember this is the one without the AB next to it) to your CLASS EXERCISE folder
2. Open the report from your CLASS EXERCISE folder
3. Edit Query
4. Rename the Query from Template to LC Detail
5. Build Query Filters:
 - a. Select COA Yr List
 - b. Select Ledger Code Range
 - c. Select Account Type
 - d. Select Account Entity - ALL
 - e. Posting Type 1
 - f. Posting Month Range
6. Drag objects into the Result Objects panel:
 - a. Selected COA Yr List
 - b. Selected Ledger Code Range
 - c. Selected Account Type
 - d. Selected Account Entity – ALL
 - e. Selected Posting Month Range
 - f. Posting Type
 - g. COA Yr
 - h. Ledger Code Extended Name
 - i. Ledger Code
 - j. Ledger Code Name
 - k. Account Extended Name
 - l. Account Number
 - m. Account Name
 - n. Posting Month
 - o. Document Num
 - p. Date Processed
 - q. Actual
7. Run Query
 - a. Select COA Yr: 2011
 - b. Select Beginning Ledger Code: 05100701
 - c. Select Ending Ledger Code: 05101701
 - d. Select Account Type: EX
 - e. Enter Account Entity: 73000

- f. Starting Posting Month: 1
 - g. Ending Posting Month: 18
8. Save the report to your Class Exercises folder as **Chapter 8 Exercise V1**
9. Paint Header Box table with Selected Objects and Posting Type, then Format Blue Cells
10. Paint data table:
 - a. Ledger Code
 - b. Account Extended Name
 - c. Posting Month
 - d. Date Processed
 - e. Document Number
 - f. Actual
11. Set Ledger Code as Section
12. Purge data using the purge data icon
13. Drag a Horizontal Table into the Ledger Code Section (next to the section cell)
14. Duplicate table to the right
15. Save the report to your Class Exercises folder as **Chapter 8 Exercise V2**
16. Remove section cell
17. Drag Ledger Code Extended Name into gray cell of 1st table
18. Drag Actual into gray cell of the duplicate table from step 13
19. Rename Ledger Code Extended Name table to “**LC Header**” (note: Format Table, replace the block name)
20. Format LC Header table to be:

.20”	Left Edge of Section
.15”	Top Edge of Section
21. Rename the data table block to “**Data Table**”
22. Format Data Table to be:

.0”	Left Side of	LC Header
.15”	Bottom Side of	LC Header
23. Rename the Actual horizontal table to “**LC Total**”
24. Format LC Total table to be:

.0”	Left Side of	Data Table
.15”	Bottom Side of	Data Table
25. Change the formula in the blue cell (using the formula editor) of the LC Total table to read “LC ##### Total.” You are concatenating words with the ledger code object (don’t type the ledger code number, but use the object so that it will update the formula if the ledger code number changes or there are multiple ledger codes) Hint: =“LC ”+[Ledger Code]+“ Total”
26. Rename the report tab to “Ledger Code” (through document structures and filters or right click on report tab)
27. Refresh Data
28. Save the report to your Class Exercises folder as **Chapter 8 Exercise Final**

Note: this report will be used in a later chapter, so ensure it is complete.

CHAPTER 9

Multiple Queries

Goals and Objectives

Create a report with more than one query

Duplicate a query

Merged objects

Adding table footers

Goals and Objectives:

After you complete this chapter, you will be able to:

- Create a report with more than one query
- Duplicate an existing query

Introduction:

In this chapter you will learn how to utilize multiple queries to retrieve different sets of data on similar Query Filters when the data cannot be retrieved with one query. Multiple query reports are based on individual needs.

When should I use multiple queries?

- When you are trying to display data side by side for comparative analysis
- If a formula is going to include an object or is built in a way that the formula will need to be updated each year (month, quarter, etc.)
- When working with two or more years and so that you do not want to duplicate posting month 19

Scenario:

The purpose of this multiple query report is to illustrate three different Chart of Account years for the utility expenditure accounts for one appropriation in a single table.

- Find and open **Template Report** from your ALDER 201 folder
- Save report as **MQ AR by AC**
- Edit Query
- Name first query “AR TY 2008”

Add objects to Query Filters

Select COA Yr List
 Select Appropriation Entity Number
 Select Appropriation Term Yr
 Select Account Entity – ALL
 Select Account Type
 Posting Month Range
 Posting Type List

Add objects to Result Objects

Selected COA Yr List
 Selected Appropriation Entity Number
 Selected Appropriation Term Yr
 Selected Account Entity – ALL
 Selected Account Type
 Selected Posting Month Range
 Selected Posting Type List
 Account Extended Name
 Actual

- Run Query with the following prompts for query #1:

Select COA Yr	2008;2009
Select AR Entity Number	50674
Select AR Term Yr	2008
Select Account Type	EX
Select Account Entity – ALL	73525
Select Posting Type(s)	1
Starting Posting Month	1
Ending Posting Month	18
- Paint report
 - Go to Available Objects and add the Selected Objects to the header table
 - Add Account Extended Name and Actual to the data table
 - Update the blue boxes in the header table
 - Update the Actual column header (blue box) to read **TY 2008**

MQ AR by AC

Account Entity	73525
Account Type	EX
Appropriation Entity	50674
Appropriation Term	2008
COA Yr List	2009, 2008
Posting Month Range	1 - 18
Posting Type List	1

Account Extended	TY 2008		
73526 - ELECTRIC	301,457.23		
73527 - WATER & S	101,944.34		
73528 - DISPOSAL	20,244.68		
73529 - NATURAL G	2,332.28		
73530 - HEATING C	1,013,316.72		

Template Refresh

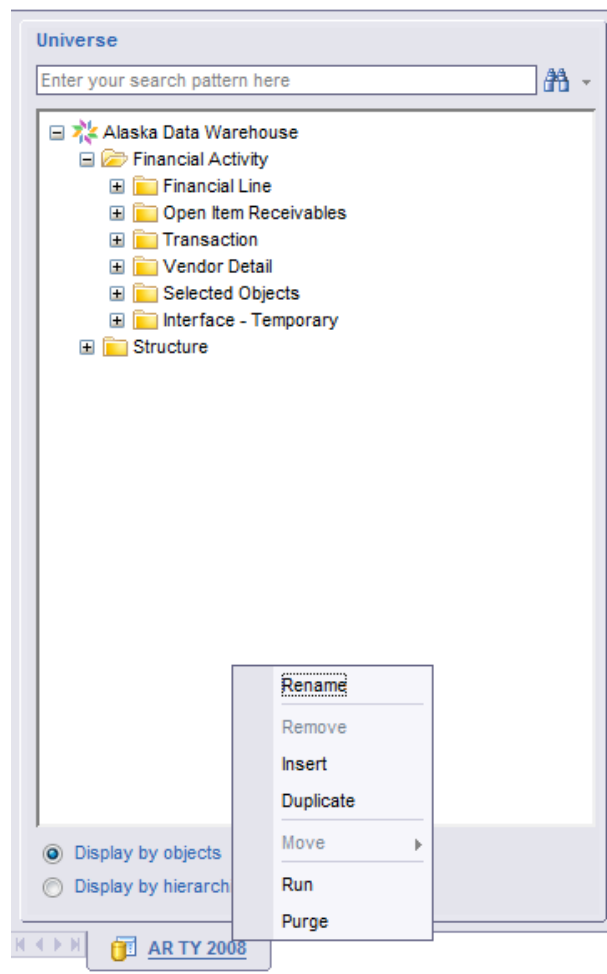
- Save report as **MQ AR by AC V1**

If you want to see the results of your queries as you create them, run the queries, then paint the reports when you have completed each query. This will also identify if you have any problems with a query before you get to far into the report.

Duplicating a Query:

It is much easier to duplicate an existing query than to add a new query. Duplicating a query will “copy” the existing query (and all of the objects) as a new query. By adding a new query (blank) you would have to determine all of the objects in the other query(s) and add them all manually. It is very easy to forget or miss an object that would be critical to the report.

- Edit Query
- Duplicate AR TY 2008 query
 - Click on the query tab AR TY 2008
 - Right click and select duplicate query



- Name second query “AR TY 2009”

Remove objects from Query Filters

Select COA Yr List

Select Appropriation Term Yr

Remove objects from Result Objects

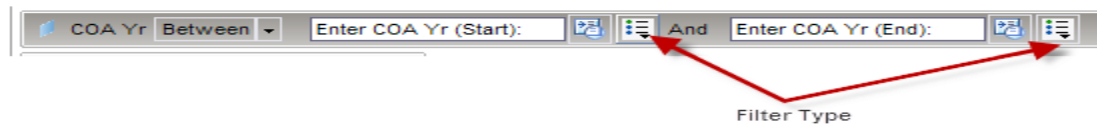
Selected COA Yr List

Selected Appropriation Term YR

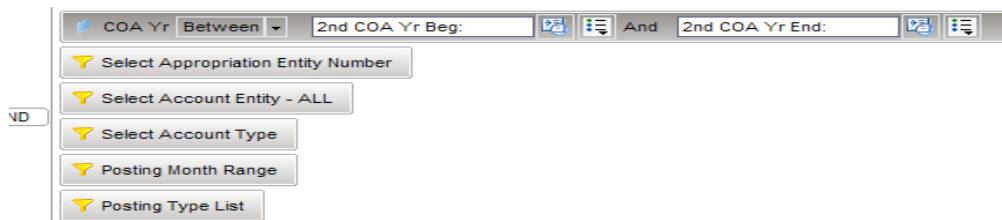
Add objects to Query Filters

COA Yr (Dimension)

- Select Operator: Between
- Filter Type: Prompt

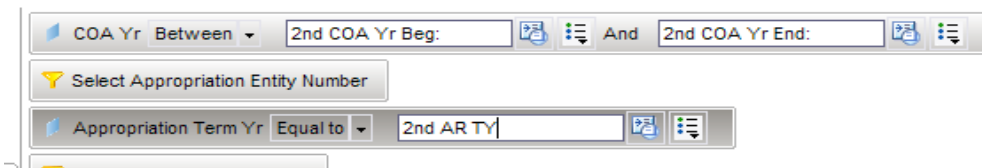


- Prompt text 1: 2nd COA Yr Beg:
- Prompt text 2: 2nd COA Yr End:



Appropriation Term Yr (Dimension)

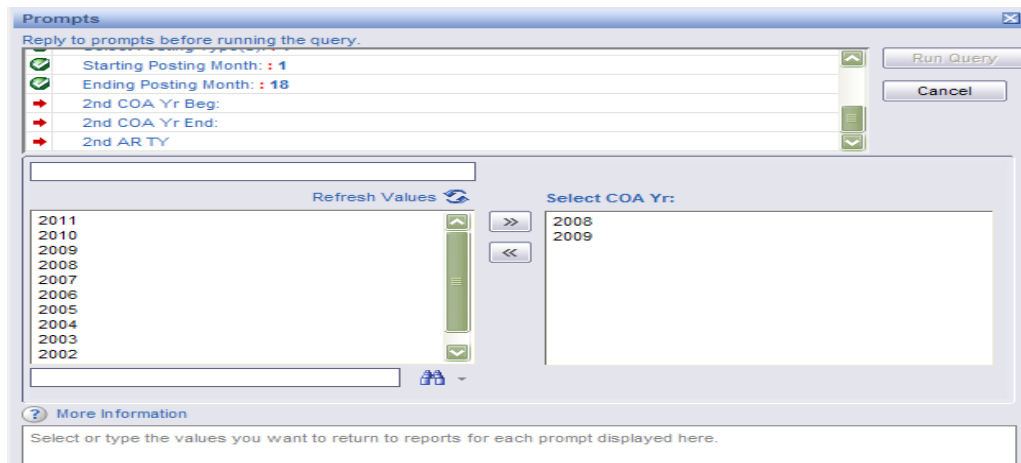
- Select Operator: Equal to
- Filter Type: Prompt
- Prompt text 1: 2nd AR TY:



- Run Query with the following new prompts for query #2: (if the Run Query is gray, then scroll down to find the new prompts)

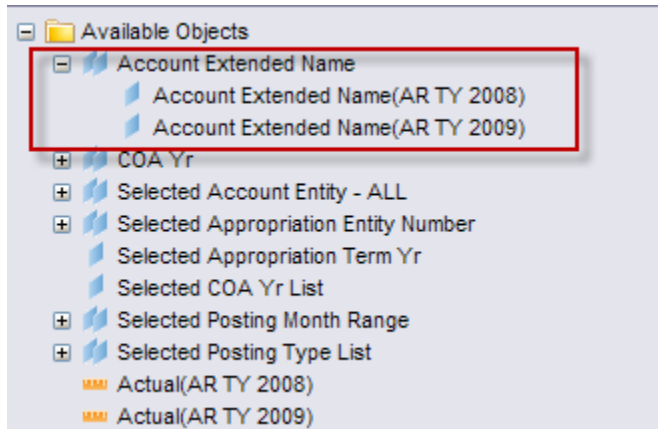
2nd COA Yr Beg: 20092nd COA Yr End: 20102nd AR TY: 2009

Account Entity: 73525 (this is the same account as the first query)



- Run Query

Merged Objects:



Notice that you now have objects with a + in front of them on the available objects list. These are called “merged” objects. Click on the + sign for one of the objects. You can now identify each object from each query. Measures are **NEVER** merged.

- Paint report for ACTUAL COLUMN ONLY
 - When adding the object from the 2009 query add only the measure Actuals (AR TY 2009) in the column next to 2008 actual
 - Update the Actual column header (blue box) to read **TY 2009**
- Save report as **MQ AR by AC V2**

We are now ready to create our last query.

- Edit Query
- Duplicate AR TY 2009 query
 - Click on the query tab AR TY 2009
 - Right click and select duplicate query
 - Name Third query “AR TY 2010”
- Change: Query Filters

COA Yr (Dimension)

 - Prompt text 1: 3rd COA Yr Beg:
 - Prompt text 2: 3rd COA Yr End:
- Update Filter

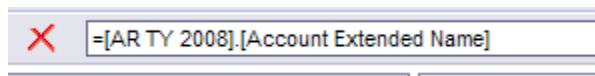
Appropriation Term Yr (Dimension)

 - Prompt text 1: 3rd AR TY:
- Update Filter

- Run Query with the following new prompts for query #3:

3rd COA Yr Beg:	2010
3rd COA Yr End:	2011
3rd AR TY	2010
Account Entity:	73525 (this is the same account as the first query)
- Run Query
- Paint report with 3rd query object - Actual (AR TY 2010)
 - Update the Actual column header (blue box) to read **TY 2010**

Notice that the account extended name column is only showing the data from the first query that we painted (click on the cell and view the formula on the formula bar).



- Drag the “merged” object “Account Extended Name” onto the report creating a new column 2



Is there a difference between column 1 and column 2? In this instance there was no change but often there can be changes for example an account code could be used in one year and not another year. It is very important to drag the merged object into the report once you have completed all of the queries **into a new column**.

- Delete first column with the unmerged data
- Update header box to represent the multiple queries. In this example, we are changing the COA YR List and Appropriation Term Year

COA Yr List	2008,2009,2010,2011
Appropriation Entity Number	50674
Appropriation Term Yr	2008, 2009, 2010
Account Entity - ALL	73525
Account Type	EX
Posting Month Range	1 - 18
Posting Type List	1

- Save report as **MQ AR by AC V3**

NOTE:

- ✓ All dimensions that are merged have a “+” next them
- ✓ If you click on the “+” you will see an object from each query
- ✓ Measures are not merged
- ✓ All dimensions should be on all queries
- ✓ When you change query prompts, you need to change how the prompt will display in the user prompt box, by using a different naming technique – the naming cannot be the same as existing prompts
- ✓ Use Merged objects when you are changing or updating the report column layouts
- ✓ Since measures are not merged, you have to merge them through a formula in the columns that they appear

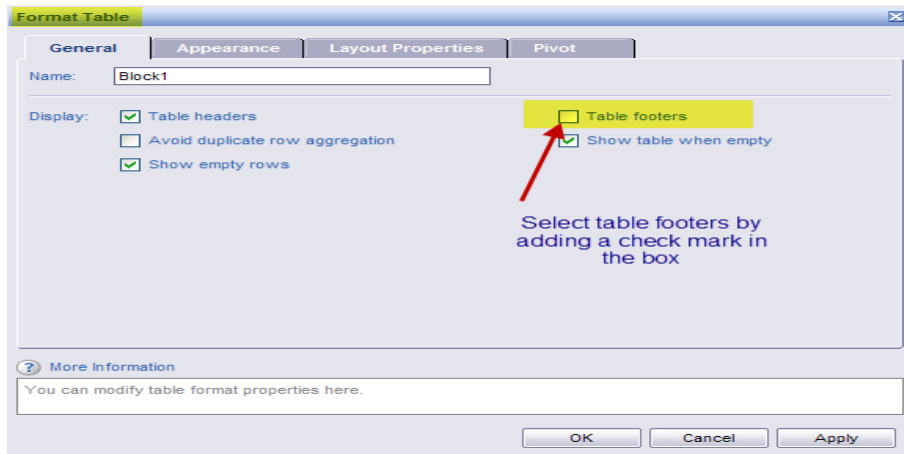
Now we can add a formula to a new column to illustrate how to aggregate the information.

- Insert a new column at the end of the table and highlight the column
 - You should add a formula to all columns that have dollar amounts (e.g. actual, authorization, encumbrance)
- Select the formula editor (fx) create the formula using the “measure” available objects
 - =[AR TY 2008].[Actual]+[AR TY 2009].[Actual]+[AR TY 2010].[Actual]
 - Validate the your formula
 - Apply
 - OK
- Convert the formula to a variable (select the variable box)
 - Name the variable: MCOA Actual
 - Qualification: Measure
 - OK
- Update the blue cell

Add Table Footers:

Table footers can be used to add totals to columns

- Click on Data Table
- Format Table
- Select Table footers (general tab)



- Drag the actual objects into the footer row

The screenshot shows the report design tool interface. On the left is the 'Available Objects' pane with a tree view containing 'Account Extended Name', 'Selected Account Entity - ALL', 'Selected Account Type', 'Selected Appropriation Entity Number', 'Selected Appropriation Term Yr', 'Selected COA Yr List', 'Selected Posting Month Range', 'Selected Posting Type List', and 'Actual(AR TY 2008)', 'Actual(AR TY 2009)', 'Actual(AR TY 2010)'. On the right is the report preview titled 'MQ AR by AC V4'. It contains a table with columns for 'COA Yr List', 'AR Number', 'AR TY', 'Account Entity', 'Account Type', 'PM Range', and 'PT List'. Below this is a table with columns for 'Account Extended Name', 'TY 2008', 'TY 2009', 'TY 2010', and 'Total'. Red arrows indicate dragging the 'Actual(AR TY 2008)', 'Actual(AR TY 2009)', and 'Actual(AR TY 2010)' objects from the 'Available Objects' pane to the footer row of the table.

Account Extended Name	TY 2008	TY 2009	TY 2010	Total
73526 - ELECTRICITY	301,457.23	348,032.74	509,943.34	1,159,433.31
73527 - WATER & SEWAGE	101,944.34	72,616.27	84,838.28	259,398.89
73528 - DISPOSAL	20,844.68	20,198.90	20,415.40	60,858.98
73529 - NATURAL GAS/PROPANE	2,332.28	2,458.18	2,660.66	7,451.12
73530 - HEATING OIL	1,013,316.72	671,579.49	504,210.90	2,189,107.11
	1,439,295.25			

- Drag the new Variable into the final footer
- Rename the row's grey box to "Total"
- Save report as **MQ AR by AC Final**

NOTE: Remember to add formulas to break totals when necessary. If you have more than an actual column on your report you must create variable for Authorized and Encumbrances. Be sure that these are also added to all Breaks, Sections, and Report totals as applicable.

Review:

1. When would you need multiple queries?
2. Describe how you would duplicate a query?
3. What are the advantages to duplicating a query vs. adding a query?
4. Should you wait until you have created all of your queries before painting your report?

Exercise:

Scenario:

You have federal grants that are tracked using ledger codes. A manager has asked to verify that the expenditures match the federal revenue collected by the setup year. You have already provided detail data by ledger code, but do not want to use that report. To accommodate this request, you will copy an existing report that you created and modify it.

1. Find and open the report **Chapter 8 Exercise Final** from your Class Exercises folder
2. Save report as **Chapter 9 Exercise V1**
3. Rename the Report Tab to “LC Detail”
4. Edit Query
5. Rename Query to “LC Expenditures”
6. Drag the following object into the Result Objects panel:
 - a. CC Code/SY
7. Drag Select Collocation Code Setup Yr filter into Query Filters panel
8. Drag Selected Collocation Code Setup Yr dimension into Result Objects panel
9. From the Query Filters panel, remove:
 - a. Select Account Type
10. From the Result Objects panel, remove:
 - a. Selected Account Type
11. Drag the following object into the Query Filters panel:
 - a. Acct Type
 - i. Change the operator to “Equal to”
 - ii. Filter is “Constant”
 - iii. Value Select: EX
12. Duplicate Query
13. Rename Query LC Revenues
14. Change Acct Type
 - a. Value Select: RR
15. Run Query

a. Select COA Yr	2007;2008
b. Beginning Ledger Code	05017100
c. Ending Ledger Code	05017400
d. Collocation Code Setup Yr	2007
e. Account Entity	ALL
f. Starting Posting Month	1
g. Ending Posting Month	18
16. Run Query
17. Save report as **Chapter 9 Exercise V2**
18. Duplicate Report
19. Change Report Tab to “LC Summary”

20. At the beginning of the Data Table add a column
 - a. CC Code/SY (merged object)
21. Rename the Actual column header to Expenditures
22. At the end of the Data Table add the object Actual (LC Revenues) - Rename column header to Revenues
23. Remove the following columns to get summary information by the CC Setup Yr
 - a. Account Extended Name
 - b. Posting Month
 - c. Date Processed
 - d. Document Number
24. Update all of the tables using the merged dimensions. You must drag the merged object into a new row or column of the table and delete the row or column that is not merged. Verify in the formula bar that you are using the object [Ledger Code Extended Name]
25. Insert a new column at the end of the data table
26. Create a variable that adds expenditures + revenues in the new column
27. Save the report to your Class Exercises Folder as **Chapter 9 Exercise Final**

CHAPTER 10

Reference Reporting

Goals and Objectives

Reference Reporting Using Multiple Queries

Multiple data tables

Goals and Objectives:

After you complete this chapter, you will be able to:

- Create a reference report using multiple queries
- Adding multiple data tables to display reference information and financial information

Introduction:

ALDER does not allow reference and financial information to be displayed in one data table. It is necessary to add multiple tables for ALDER to display information regarding warrants with reference information. By adding multiple tables it allows the user to display the financial information next to the reference information.

Scenario:

The purpose of this exercise is to demonstrate how to retrieve reference information and display that information in a separate table next to the financial information table. This report will show warrant information for an appropriation.

Multiple Query Reference Report

- Find and open the **Template Report** from your ALDER 201 folder
- Click on Edit Query

Add objects to Query Filters

Select COA Yr List
 Select Appropriation Entity Number
 Select Appropriation Term Yr
 Select Account Entity – ALL
 Select Account Type
 Posting Type List
 Posting Month Range

Add objects to Result Objects

Selected COA Yr List
 Selected Appropriation Entity Number
 Selected Appropriation Term Yr
 Selected Account Entity – ALL
 Selected Account Type
 Selected Posting Type List
 Selected Posting Month Range

 Vendor Num
 Vendor Name
 Date Processed
 Document Num
 Transaction Des L1 (optional)
 Financial Line Unique Identifier
 EP Warrant Amount (Detail under COA Yr)
 Printed Amt (Detail under Warrant Num)

- Rename Query to FinQuery
- Run Query with the following prompts

Select COA Yr:	2011
Select AR Number:	11725
Select AR Term Yr:	2011
Select Account Type:	EX
Select Account Entity:	70000
Select Posting Type(s):	1
Starting Posting Month:	1
Ending Posting Month:	14
- Save report as **Appropriation Reference Report V1**

Special Reference Report Items

Now that we have completed our financial query we need to add the reference query. For reference reporting ALDER has created special objects for the user. These help identify references and are located in the Reference folder.

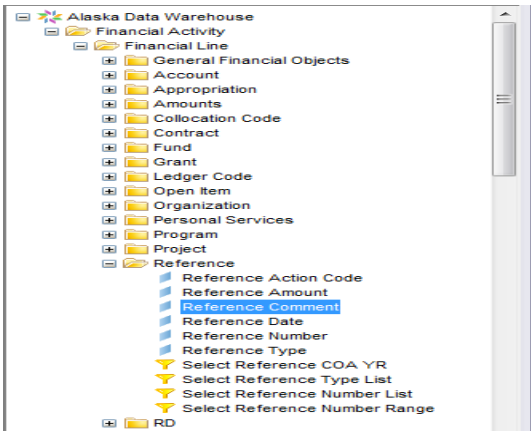
- Edit Query
- Duplicate the FinQuery
- Rename query to RefQuery
- Add and remove Result Objects for RefQuery (No changes to the Query Filters)

Remove objects from Result Objects

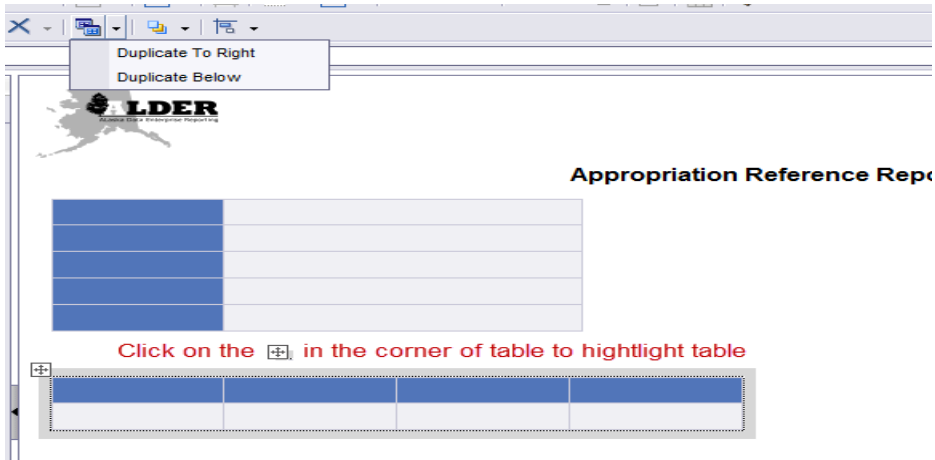
Selected COA Yr List
 Selected Appropriation Entity Number
 Selected Appropriation Term Yr
 Selected Account Type
 Selected Account Entity – ALL
 Selected Posting Month Range
 Selected Posting Type List
 COA Yr

Add objects to Result Objects

Reference Type
 Reference Number
 Reference Amount
 Reference Date
 Reference Comment



- Run Queries with same prompts
- Save Report as **Appropriation Reference Report V2**
- To duplicate the data table, highlight the data table



- Select the Duplicate icon on the toolbar; select Duplicate To Right
- Paint the header table and update the blue boxes

COA Yr List	2011
Appropriation Entity Number	11725
Appropriation Term Yr	2011
Account Entity - ALL	70000
Account Type	EX
Posting Month Range	1 - 14
Posting Type List	1

- Paint the first table with Financial Information
 - Warrant Number (merged)
 - Document Num (merged)
 - Vendor Name (merged)
 - Vendor Number (merged)
 - EP Warrant Amount (fin)
 - Printed Amount (fin)

- Paint the second table with Reference Information

Reference Type

Reference Number

Reference Date

Reference Comment

Reference Amount

Notice that the reference table is sorted on the first column Reference Type. These are separate table and since we do not have a section they are sorting independently of each other.



Last Refreshed 8/29/11 3:20 PM

Appropriation Reference Report V1

COA Yr List	2011
Appropriation Entity Number	11725
Appropriation Term Yr	2011
Selected Account Type	EX
Account Entity - ALL	70000
Posting Month Range	1 - 14
Posting Type List	1

Warrant Num	Document Num	Vendor Name	Vendor Num	EP Warrant Amount	Printed Amt	Reference Type	Reference Number	Reference Date	Reference Comment	Reference Amount
02189848	AQ00514590027	GCI COMMUNICAT	GEC84138	40.20	0.00	ACC	00000000144		CUSTOMER #	0.00
02189848	AQ00514590027	GCI COMMUNICAT	GEC84138	#MULTIVALUE	0.00	ACC	00000000281		CUSTOMER #	0.00
02189857	AQ00514590028	GCI COMMUNICAT	GEC84138	78.81	0.00	ACC	00000000765			0.00
02189857	AQ00514590028	GCI COMMUNICAT	GEC84138	#MULTIVALUE	0.00	ACC	000028		1099MISC 16,000 V	15,918.16
02189867	AQ00514590029	GCI COMMUNICAT	GEC84138	810.56	0.00	ACC	0005741766		SCOT AREHART AC	195.00
02189867	AQ00514590029	GCI COMMUNICAT	GEC84138	#MULTIVALUE	0.00	ACC	0007715404		ERIK ANDERSON /	0.00
02189901	AQ00539210001	TRAVE, INC	OFFP00116	209.16	0.00	ACC	0007715404		ERIK ANDERSON /	195.00
02189901	AQ00539210001	TRAVE, INC	OFFP00116	#MULTIVALUE	0.00	ACC	0007715404		ERIK ANDERSON /	695.00
02198058	AQ00546980001	AMAZON.COM INC	AMC01331	191.51	0.00	ACC	0007715404		ERIK ANDERSON /	1,215.00

- From the 1st table, set the column “Warrant Number” as a section.

Notice that the tables are sorted based on the warrant number

Last Refreshed 8/29/11 3:20 PM

Appropriation Reference Report V1

COA Yr List	2011
Appropriation Entity Number	11725
Appropriation Term Yr	2011
Selected Account Type	EX
Account Entity - ALL	70000
Posting Month Range	1 - 14
Posting Type List	1

02189848

Document Num	Vendor Name	Vendor Num	EP Warrant Amount	Printed Amt
AQ00514590027	GCI COMMUNICAT	GEC84138	40.20	0.00
AQ00514590027	GCI COMMUNICAT	GEC84138	#MULTIVALUE	0.00

Reference Type	Reference Number	Reference Date	Reference Comment	Reference Amount
ACC	120-032113	7/13/10		40.20
BIL	02401	7/26/10	02401	40.20
CBN	*****28684	7/26/10	DOA DOF PURCHA	40.20
GEN	INV29634083.3009	7/13/10		40.20
INV	29634083	6/1/10		22.73
INV	30093918	7/1/10		17.47
MCC	4899	7/9/10	GCI PAYMENT	40.20
OC	*****42830	7/26/10	RENNER 1 FHFA	40.20

NOTE: Financial line amount posted to the appropriation may be different than the warrant amount

- Save Report as **Appropriation Reference Report Final**

CHAPTER 11

Formulas and Variables

Goals and Objectives

Formulas

Variables

Help

Goals and Objectives:

After you complete this chapter, you will be able to:

- Research various formula options
- Identify and use the help key

Introduction:

Please reference ALDER 101 student guide to:

- Calculate simple formulas ([ObjectA] + [ObjectB])
- Concatenate words with numbers or objects ("Your available balance is " + [ObjectA])
- Calculate conditional functions If([ObjectA] = XX; then display this; otherwise display that)

In this chapter we will provide an example of a more complex formula.

Scenario:

We have a grant report in which we want to display the department number in a column. This will help identify the department at a glance. Since there is no object specifically to identify a department we are going to need a formula. The easiest way to find this is through a "Source RD Code". The first two digits of a Source RD Code identify a department. That is how it is assigned in AKSAS. How can I create a formula to display only the first two digits of the Source RD Code?

- Find and copy **Detail Transactions for Grant by Vendor** to your ALDER 201 class folder
- Open the report from the ALDER 201 class folder

Create a Formula

How can we get the beginning two numbers of the Source RD Code?

- Add Source RD Code to the data table next to Input RD Code
- Click on the grey cell of the Source RD Code
- Select the formula editor (*fx*)
 - How can I find the left two numbers of the Source RD Code?
 - What available function could I use?

Let's review some of the available functions. By selecting the functions you will see that each one has a description.

- In Available Functions, expand All, Click on Substr

Description - Returns part of a character string


For example:

=Substr(FormatNumber([Source RD Code];"00000");0;2)
- In Available Functions, Click on Left

Description - Returns the leftmost characters of a string

For example:

=Left(FormatNumber([Source RD Code];"00000");2)
- Click Cancel

To obtain more information on these we are going to use the help button on the Header toolbar 

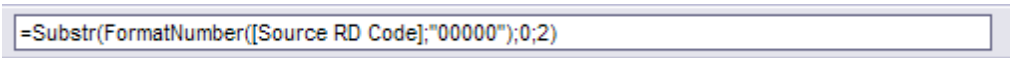
- Select Search
- Type in functions
- There are many options and one of the hardest part is finding the correct function.

Note: Remember in order to use the help key you **must** be in the report.

- Update the following prompts:

Select Grant COA Yr:	2011
Select GR Number	00001
Select AC Number	70201
Starting Posting Month	1
Ending Posting Month	1

- Save the report as **Detail Transactions for Grant by Vendor – Formula**
- Find the column Input RD and insert a new column to the right
- Highlight the new column
- Select the formula editor (fx)
 - From Available Functions select Substr (double click)
 - From Available Functions select FormatNumber
 - From Available Objects select Source RD Code
 - From Available Operators select the semi-colon (;)
 - Type “00000”
 - Move the cursor between the))
 - From Available Operators select the semi-colon (;)
 - Type 0
 - From Available Operators select the semi-colon (;)
 - Type 2
 - Validate Formula
 - Click OK
- The formula should look like this;



```
=Substr(FormatNumber([Source RD Code],\"00000\");0;2)
```

Convert a Formula to a Variable

- Turn the formula into a variable named **Department**
- In the blue header box, type **Dpt Nbr**
- Insert a new column to the right of column **Dpt Nbr**
 - In the formula editor (fx) create the following formula
`=If([Department]="24"or[Department]="25";"DOT&PF";")"`
- Review the data in the report (go to the end of the report and you will see dept 24 and dept 25 now show DOTP&F
- In the blue header box, type **Department Name**
- If necessary, widen the column so you can see the column title

Document Num	Trans Code	Date Processed	PM	Input RD Code	Dpt Nbr	Department Name	Warrant Num	Collocation Code	Prog Num
AQ00546160001	310-55	07/23/2010	01	24111	24	DOT&PF	02197419	24433416-11	574
AQ00547980001	310-55	07/27/2010	01	24051	24	DOT&PF	02199164	24433479-10	574
AQ00547980001	310-55	07/27/2010	01	24051	24	DOT&PF	02199164	24433479-10	574
AQ00547980002	310-55	07/27/2010	01	24051	24	DOT&PF	02199168	24433479-10	574
AQ00547980002	310-55	07/27/2010	01	24051	24	DOT&PF	02199168	24433479-10	574
AQ00547980003	310-55	07/27/2010	01	24051	24	DOT&PF	02199173	24433479-10	574
AQ00547980003	310-55	07/27/2010	01	24051	24	DOT&PF	02199173	24433479-10	574
AQ00553080004	310-55	07/30/2010	01	24079	24	DOT&PF	02204951	24432437-11	572

- Save the report as **Detail Transactions for Grant by Vendor – Formula and Variable**

Summary:

After completing this chapter, you are now able to:

- Research various formula options
- Identify and use the help key

APPENDIX:

Chapter 3 – Exercise Questions

6. Where are all of the data objects that you might want to report on located?
 Report panel – Available Objects
 Universe panel – Edit Query
7. Where would you put data objects that you want to be available on your report?
 Result Objects panel
8. Where do you limit the information being retrieved from the data warehouse?
 Query Filters panel
9. What are the different types of filters?
 Predefined filters Prompted filters Unprompted Filters
10. What are the different types of objects?
 Dimension Measure Detail
 Predefined filters Selected dimensions
11. Using the report you just copied, identify the Predefined Filters in the Query Filters panel.
 Select COA Yr Select Collocation Code Setup Yr List
 Select Collocation Code List Select Account Entity – ALL
 Posting Type 1 Posting Month Range
12. Is the User Defined Filter prompted or unprompted?
 Unprompted – It is a filter
13. Find the following objects in the Universe panel and identify what folder you found each one in: **Note:**
Object names listed below are as they appear in the Universe. Objects can sometimes be found in multiple folders.
 - a. Acct Type - Financial Activity; Financial Line; General Financial Objects
 - b. CC Code/SY - Financial Activity; Financial Line; Collocation Code
 - c. Open Item Num - Financial Activity; Financial Line; Open Item
 - d. Input RD Code - Financial Activity; Financial Line; Transaction Fin (FIN); RD Fields
 - e. Date Processed - Financial Activity; Financial Line; Transaction Fin (FIN); General Transaction (FIN)
 Objects
 - f. Total Authorized - Financial Activity; Financial Line; Amounts
 - g. Select Grant Entity Number - Financial Activity; Financial Line; Grant
 - h. Selected Grant Entity Number - Financial Activity; Selected Objects; Grant (SO)

Chapter 9 – Review Questions

1. When would you need multiple queries?

- When you're trying to display data in a column and there isn't an object available, then a formula can be created or multiple queries can be created
- If a formula is going to include an object or is built in a way that the formula will need to be updated each year (month, quarter, etc.), then you might want to consider multiple queries
- When working with two or more years and you don't want to duplicate posting month 19

2. Describe how you would duplicate a query?

Select query tab

Right click

Duplicate

3. What are the advantages to duplicating a query vs adding a query?

Duplicating a query allows you to copy all of the existing objects

Adding a query gives you a blank query and you would have to re-add any object that you would need

4. Should you wait until you have created all of your queries before painting your report?

Not necessarily, if you paint as you go you can see differences as they occur and you will be able to tell if you have data in each query.

Available Functions

Often users need to build additional calculations or objects into a report beyond the report's base objects or calculations.

Web Intelligence has seven categories of Available Functions:

Category	Description
All	All the functions for all the categories listed below in this table.
Aggregate	Aggregates data (for example by summing or averaging a set of values)
Character	Manipulates character strings
Date and Time	Returns date or time data
Document	Returns data about a document
Data Provider	Returns data about a document's data Provider
Logical	Returns TRUE or FALSE.
Numeric	Returns numeric data
Misc	Functions that do not fit into the above Categories

Available Operators

The tool provides the use of operators for both query and report filters, calculations and formulas during the creation or modification of a report. The table below lists the operators available and provides an example of each operator in the context of a business question:

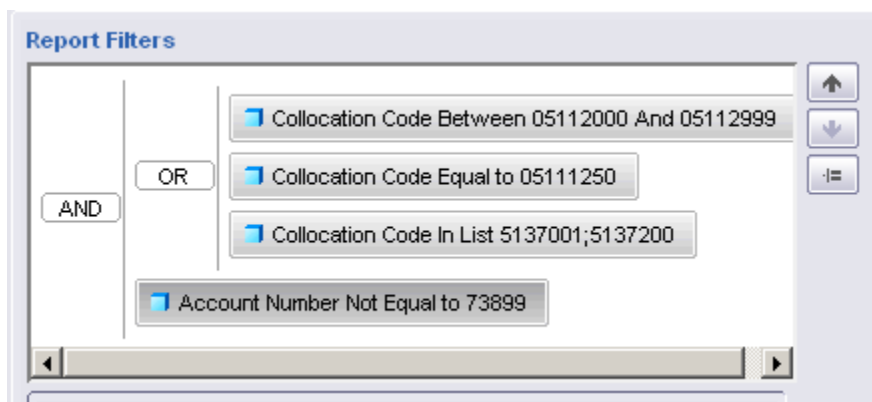
To obtain data...	for example...	Select...	to create the filter...
equal to a value a user specifies,	retrieve data for the US only,	= Equal to	[Country] Equal to US.
not equal to a value a user specifies,	retrieve data for all countries other than the US	!= Not equal to	[Country] Not Equal to US
greater than a value a user specifies,	retrieve data for customers aged over 60,	> Greater than	[Customer Age] Greater than 60
greater than or equal to a value a user specifies,	retrieve data for revenue starting from \$1.5M upward,	>= Greater than or equal to	[Revenue] Greater than or equal to 1000500
lower than a value a user specifies,	retrieve data for exam grades below 40,	< Less than	[Exam Grade] Less than 40
lower than or equal to a value a user specifies,	customers whose age is 30 or less,	<= Less than or equal to	[Age] Less than or equal to 30
that falls between two values a user specifies and includes those two values,	weeks starting at week 25 and finishing at 36 (including week 25 and week 36),	Between	[Weeks] Between 25 and 36

that falls outside two given values a user specifies,	all the weeks of the year, except for weeks 25 through 36 (week 25 and week 36 are not included),		Not Between	[Weeks] Not Between 25 and 36
the same as several values a user specifies,	user only wants to retrieve data for the following countries: the US, Japan, and the UK,		In List	[Country] In list 'US; Japan; UK'
different from the multiple values a user specifies,	user does not want to retrieve data for the following countries: the US, Japan, and the UK,		Not in list	[Country] Not in list 'US; Japan; UK'
that includes a specific string,	customers whose date of birth is March 1972,		Matches Pattern	[DOB] Matches pattern, '72'
that doesn't include a specific string,	customers whose names do not begin with S,		Different from Pattern	[DOB] Different from pattern, 's'
that corresponds to two values a user specifies,	customers who have both a fixed telephone and a mobile phone,		Both	[Account Type] Both "fixed" and "mobile"
that corresponds to all values a user specifies	customers who have a fixed telephone, mobile phone, and fax phone		** AND	[Account Type] "fixed" AND "mobile" AND "fax"
that corresponds to a value a user specifies	customers who have a fixed telephone, mobile phone, or fax phone		** OR	[Account Type] "fixed" OR "mobile" OR "fax"
that corresponds to one value a user specifies and does not correspond to another value a user specifies	customers who have a fixed telephone, but don't have a mobile phone,		Except	[Account Type] "fixed" Except "mobile"

**** AND** – Returns data ONLY when ALL of the criteria is TRUE

**** OR** – Returns data when ANY of the criteria is TRUE

Additional Example of Nested Filters:









Available Operators to AVOID

Some operators can create confusion when used in a report and should not be used!

- Section
- Block
- Body
- Report
- Row
- Column
- User Response

Standard Calculations:

Standard calculation functions can be used to make quick or standard business calculations on the data in Web Intelligence reports. These calculations are available from the Calculations list on the Report toolbar. Customized functions and formulas can be applied to more advanced calculations on the data as well. Users can utilize the following standard calculations:

Calculation Type	Icon	Use to...
Sum		Calculate the sum of the selected data.
Count		Count all rows for a measure object or count distinct rows for a dimension or detail object.
Average		Calculate the average of the selected data.
Minimum		Display the minimum value of the selected data.
Maximum		Display the maximum value of the selected data.
Percentage		Display the selected data as a percentage of the total. The results of the percentage are displayed in an additional column or row of the table.

ALDER Key Terminology

Available Objects	Data elements that are available to use in a report but do not require re-executing the report.
Business Objects	Business Objects is the manufacturer of InfoView and Web Intelligence software which ALDER uses.
Enterprise Reports	Reports developed for statewide use. They can be copied and customized to meet your agency's needs.
InfoView	The portal for ALDER that collects, consolidates, and presents data and reports.
Measure	Retrieves numeric data that is the result of calculations on data in the database.
Objects	An element in the universe that corresponds to a selection of data in the database. The name of an object is usually derived from the business terms.
Prompt	A prompt is a dynamic filter that displays a question every time data is refreshed in a report. The prompts are answered by either typing or selecting the value(s) to be viewed. Web Intelligence retrieves only the values specified.
Query	A query is a request for data from a database or other source. A user builds a query containing "objects" from a "universe". If the data is available, the requested data is returned usually in the form of a table or a chart.
Refresh	Refreshing reports ensures that you are viewing the most recent data available in the database.
Report	A report is the graphical output from a query that has been executed. It includes data returned from the query, as well as formatting applied to the data to make the data more readable for end users.
Report Filter	Report filters are applied to the data retrieved by a report that limit the values displayed in the report. Each report can be filtered to display a different subset of the same data depending on the user requirements.
Schedule	Scheduling a report allows the report to run automatically at specified times. When a scheduled report runs successfully, an "instance" is created.
Template Reports	Blank reports which include the standard report elements (logo, page numbers, last refresh date, etc.).
Universe	A universe is a logical group of data tables used for reporting. Universes provide an easy to use and understand interface for non-technical Web Intelligence users to run queries against a database to create reports and perform data analysis.
Web Intelligence	A Business Objects tool that allows users to create queries and reports to analyze data.

Definitions of User Roles and Capabilities

Group	Course	Capabilities	Prerequisites
Report Recipients	None	<ul style="list-style-type: none"> Receive an Excel or PDF report (file) 	None
Report Viewers	ALDER 100 Online	<ul style="list-style-type: none"> Run, refresh and schedule reports in enterprise, department internal, public, favorites, and user's inbox folders Receive sections of scheduled reports Change prompt values for a report to limit the results displayed, but cannot change report layout 	Increment 1: Some knowledge of structures and financial data. Increment 2: Some knowledge of payroll data
Interactive Users	ALDER 101 (1 1/2 day)	Same capabilities as Report Viewers, plus the ability to: <ul style="list-style-type: none"> Drag and drop fields onto a report from a list of objects Change the sort, filter, and add new sections and breaks to a report Create different views of data (e.g., charts) 	ALDER 100 AND Intro to AKSAS, OR Good working knowledge of structures and financial data Increment 2: Good working knowledge of payroll data
Report Developers	ALDER 201 (2 days)	Same capabilities as Interactive Users, plus the ability to: <ul style="list-style-type: none"> Create new reports Perform quality assurance and certify developed reporting prior to being deployed Develop agency-specific ad-hoc reports 	ALDER 101
Agency Advocates	ALDER 201 (2 days)	Same capabilities as Report Developers, plus the ability to: <ul style="list-style-type: none"> Responsible for the two-way communications between the department and the ALDER Project Team Serve as the first line of help desk support for department ALDER users Responsible for maintaining department folder structure within ALDER 	ALDER 101